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Jan DELAVAL
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Access DB# 87247

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Josephine YOUNG Examiner # : 77813 Date: 12/12/02
Art Unit: 1623 Phone Number 30 605-1201 Serial Number: 09/587,662
Mail Box and Bldg/Room Location: CM1 8D04 Results Format Preferred (circle): PAPER DISK (E-MAIL)
CM1 8B19

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Methods and Compositions for Modulating Drug Activity through Telomere Damage

Inventors (please provide full names): AU, Jessie L.-S.; WENTJES, M. Guillaume

Earliest Priority Filing Date: 06/04/1999

****For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.***

Attached: 1) Bib Sheet; ~~2) ...~~; 3) Pending Claims (1-28; 33-35; 40-48)
[illegible]

Please search: 1) ~~[illegible]~~ methods to treat cancer/abnormal cell proliferation w/ a) telomere damaging agent AND b) telomerase inhibiting agent

2) ~~[illegible]~~ methods to treat cancer/abn cell prolif/[illegible] w/ a) paclitaxel + b) antisense nucleic acid sequence, AZT, ddI (or other nucleoside/nucleotide analogs) - [illegible] AZT or ddT

See claims 1, 23-27, 40, 42, 44-48

Thanks!

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

03-12/s/02 - 93-170

****

STAFF USE ONLY	**Type of Search**	**Vendors and cost where applicable**
Searcher: Jan	NA Sequence (#)	STN ✓
Searcher Phone #: 4498	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up: 12/15/02	Bibliographic ✓	Dr.Link
Date Completed: 12/15/02	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time: 15	Patent Family	WWW/Internet
Online Time: 5 70	Other	Other (specify)

PTO-1590 (8-01)

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Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 - 703-308-4498
jan.delaval@uspto.gov

```
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provided by InfoChem.

STRUCTURE FILE UPDATES:   13 DEC 2002  HIGHEST RN 476274-11-0
DICTIONARY FILE UPDATES:  13 DEC 2002  HIGHEST RN 476274-11-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can tot l5

L5   ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2002 ACS
RN   30516-87-1  REGISTRY
CN   Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   3'-Azido-3'-deoxythymidine
CN   3'-Azidothymidine
CN   3'-Deoxy-3'-azidothymidine
CN   874: PN: WO02055741 SEQID: 889 claimed sequence
CN   Azidothymidine
CN   Azitidin
CN   AZT
CN   AZT (pharmaceutical)
CN   BW-A 509U
CN   NSC 602670
CN   Retrovir
CN   Retrovir IV
CN   Timazid
CN   ZDV
CN   Zidovudine
FS   STEREOSEARCH
DR   399024-19-2
MF   C10 H13 N5 O4
CI   COM
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DIOGENES,
       DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIPAT,
       IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PHAR, PHARMASEARCH,
       PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN,
       USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:   DSL**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.  Rotation (+).
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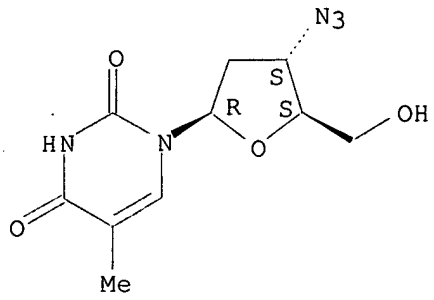


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4190 REFERENCES IN FILE CA (1962 TO DATE)
166 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4208 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:370337

REFERENCE 2: 137:369566

REFERENCE 3: 137:365526

REFERENCE 4: 137:364613

REFERENCE 5: 137:363028

REFERENCE 6: 137:358121

REFERENCE 7: 137:346131

REFERENCE 8: 137:345638

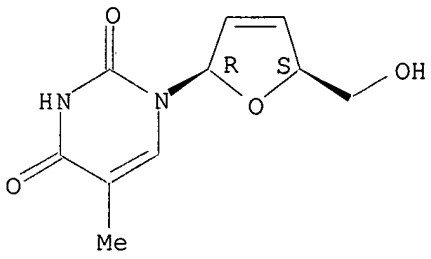
REFERENCE 9: 137:345635

REFERENCE 10: 137:345623

L5 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 3056-17-5 REGISTRY
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2'-Thymidinene, 3'-deoxy- (8CI)
CN Thymine, 1-(2,3-dideoxy-.beta.-D-glycero-pent-2-enofuranosyl)- (7CI, 8CI)
OTHER NAMES:
CN 2',3'-Didehydro-3'-deoxythymidine
CN 3'-Deoxy-2',3'-didehydrothymidine
CN 879: PN: WO02055741 SEQID: 894 claimed sequence
CN BMY 27857
CN D 4T
CN **D 4T (nucleoside)**
CN Sanilvudine
CN Stavudine
CN Zerit
FS STEREOSEARCH
DR 132425-31-1
MF C10 H12 N2 O4
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,

BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IPA, MEDLINE, MRCK*, PHAR, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: WHO

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1177 REFERENCES IN FILE CA (1962 TO DATE)
30 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1186 REFERENCES IN FILE CAPLUS (1962 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:363028

REFERENCE 2: 137:346131

REFERENCE 3: 137:345638

REFERENCE 4: 137:345635

REFERENCE 5: 137:342084

REFERENCE 6: 137:333119

REFERENCE 7: 137:332775

REFERENCE 8: 137:320060

REFERENCE 9: 137:319998

REFERENCE 10: 137:310928

=> d ide can 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 33069-62-4 REGISTRY
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 7,11-Methano-1H-cyclodeca[3,4]benz[1,2-b]oxete, benzenepropanoic acid deriv.

CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, 6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, [2aR-[2a.alpha.,4.beta.,4a.beta.,6.beta.,9.alpha.(.alpha.R*,.beta.S*),11.alpha.,12.alpha.,12a.alpha.,12b.alpha.]]-

CN Tax-11-en-9-one, 5.beta.,20-epoxy-1,2.alpha.,4,7.beta.,10.beta.,13.alpha.-hexahydroxy-, 4,10-diacetate 2-benzoate 13-ester with (2R,3S)-N-benzoyl-3-phenylisoserine (8CI)

OTHER NAMES:

CN ABI 007

CN BMS 181339-01

CN NSC 125973

CN **Paclitaxel**

CN Plaxicel

CN Taxol

CN Taxol A

CN Yewtaxan

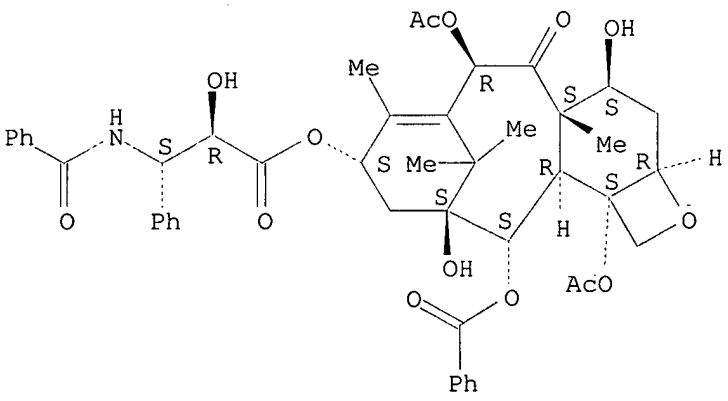
FS STEREOSEARCH

MF C47 H51 N O14

CI COM

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGNL, DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, HSDB*, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, PHAR, PHARMASEARCH, PIRA, PROMT, RTECS*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).



6638 REFERENCES IN FILE CA (1962 TO DATE)
360 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6666 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:375308

REFERENCE 2: 137:375278

REFERENCE 3: 137:375259

REFERENCE 4: 137:375077

REFERENCE 5: 137:371619

REFERENCE 6: 137:370237

REFERENCE 7: 137:369971

REFERENCE 8: 137:369559

REFERENCE 9: 137:368586

REFERENCE 10: 137:365210

=> d ide can l4

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 120178-12-3 REGISTRY
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN DNA telomerase
CN Subunit (Mesocricetus auratus)
CN **Telomerase**
CN Telomerase reverse transcriptase
MF Unspecified
CI MAN
SR CA
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, CA, CAPLUS, CBNB, CEN, CIN, IPA, PROMT, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
2901 REFERENCES IN FILE CA (1962 TO DATE)
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2911 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:375238

REFERENCE 2: 137:367532

REFERENCE 3: 137:367487

REFERENCE 4: 137:367406

REFERENCE 5: 137:367380

REFERENCE 6: 137:365746

REFERENCE 7: 137:364456

REFERENCE 8: 137:364455

REFERENCE 9: 137:364356

REFERENCE 10: 137:364304

=> d his

(FILE 'HOME' ENTERED AT 11:30:34 ON 15 DEC 2002)
SET COST OFF

FILE 'REGISTRY' ENTERED AT 11:30:44 ON 15 DEC 2002
E AZT/CN
L1 1 S E4
E D4T/CN
E D 4T/CN
L2 1 S E4

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                E PACLITAXEL/CN
L3            1 S E3
                E TELOMERASE/CN
L4            1 S E3
L5            2 S L1,L2
                SEL RN
L6           57 S E1-E2/CRN
                SEL RN L3
L7           44 S E3/CRN
L8            0 S L6 AND L7
L9           11 S L6 NOT MXS/CI
L10           7 S L9 NOT COMPD
L11          22 S L7 NOT CYCLODEXTRIN
L12          16 S L11 NOT COMPD
L13           5 S L12 AND (CLH OR H2O OR C2H4O)
L14           4 S L13 NOT IDS/CI
L15          22 S L7 NOT L11
L16          27 S L3,L14,L15
L17           9 S L5,L10

     FILE 'HCAPLUS' ENTERED AT 11:37:30 ON 15 DEC 2002
L18        4612 S L17
L19        5162 S AZT OR ZIDOVUDIN# OR AZITIDIN# OR AZIDOTHYMIDIN# OR RETROVIR#
L20        1316 S D4T OR D 4T OR STAVUDIN# OR SANILVUDIN# OR ZERIT OR BMY27857
L21        6072 S L18-L20
L22        6664 S L16
L23        9158 S PACLITAXEL OR TAXOL
L24        9195 S L22,L23
L25          58 S L21 AND L24
L26        2912 S L4
L27        3658 S TELOMERASE
L28        3661 S L26,L27
L29           2 S L25 AND L28
                E AU J/AU
L30         104 S E3,E6-E9,E15-E18
                E WIENTJES G/AU
L31           8 S E4-E7
L32           3 S L30,L31 AND L28
L33           1 S L30,L31 AND L25
L34           4 S L29,L32,L33
                E WIENTJES M/AU
L35          69 S E3-E7
L36           2 S L35 AND L28
L37           0 S L35 AND L25
L38           4 S L34,L36
L39           2 S L25 AND ?TELOMER?
L40           4 S L38,L39
                E ANTISENSE/CT
                E E4+ALL
L41        3417 S E6,E5
                E E7+ALL
L42        6709 S E9
                E E14+ALL
L43        3303 S E6,E7,E5
                E NUCLEOTIDES/CT
                E E3+ALL
L44      253674 S E7+NT
L45         367 S L24 AND L41-L44
L46           4 S L45 AND L28
L47          22 S L24 AND ?TELOMER?
L48          24 S L40,L46,L47

     FILE 'REGISTRY' ENTERED AT 11:53:10 ON 15 DEC 2002
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L49           1 S 120178-12-3
L50           1 S L49,L4

     FILE 'HCAPLUS' ENTERED AT 11:53:23 ON 15 DEC 2002
L51          17 S L50 AND L48
L52          20 S L48,L51 AND (1 OR 63)/SC,SX
L53           4 S L48 NOT L52
L54          22 S L40,L52
L55           8 S L54 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L56          11 S L40,L55
L57          56 S L25 NOT L48,L56
L58          41 S L57 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L59          41 S L58 AND L18
L60          41 S L59 AND L22
L61          32 S L60 AND (?NEOPLAS? OR ?TUMOR? OR ?MALIGNAN? OR ?CANCER? OR ?C
L62          27 S L60 AND (MIX? OR SYNERG? OR COMPOSITION OR COTHERAP? OR COMED
L63          23 S L61 AND L62
                SEL DN AN 8 9 10 13 14 15 19
L64           7 S E1-E21
L65          18 S L56,L64 AND L18-L48,L51-L64

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FILE LAST UPDATED: 13 Dec 2002  (20021213/ED)

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 substance identification.

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check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

=> d l65 all hitstr tot

L65  ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 2002 ACS
AN   2002:684654  HCAPLUS
TI   Telomere maintenance in telomerase-positive human ovarian SKOV-3
     cells cannot be retarded by complete inhibition of telomerase
AU   Gan, Yuebo; Mo, Yiqun; Johnston, Jeffrey; Lu, Jie; Wientjes, M.
     Guillaume; Au, Jessie L.-S.
CS   College of Pharmacy, The Ohio State University, Columbus, OH, 43210, USA
SO   FEBS Letters (2002), 527(1-3), 10-14
     CODEN: FEBLAL; ISSN: 0014-5793
```

PB Elsevier Science B.V.
DT Journal
LA English
CC 13 (Mammalian Biochemistry)
AB The two known mechanisms for telomere maintenance in eukaryocytes are **telomerase** in **telomerase**-pos. cells and alternative lengthening of telomeres (ALT) in **telomerase**-neg. cells. We report here that telomere maintenance in the **telomerase**-pos. human ovarian SKOV-3 cells was not affected by inhibition of **telomerase**. For comparison, the effect of **telomerase** inhibitors on telomere maintenance in another **telomerase**-pos. cell line (i.e. human pharynx FaDu cells) and the **telomerase** -neg. human osteosarcoma Saos-2 cells was examd. **Telomerase** activity was measured using a modified telomeric repeat amplification protocol and telomere length was measured using a soln. hybridization-based method and fluorescence in situ hybridization. A reverse transcriptase inhibitor (3'-azido-deoxythymidine or **AZT**) and an antisense against a component of human **telomerase** RNA (antisense hTR) were used to inhibit **telomerase**. FaDu and SKOV-3 cells showed comparable baseline **telomerase** activity. **Telomerase** activity in both cells was inhibited about equally by **AZT** (maximal inhibition of .apprx.80%) and by expression of antisense hTR (complete inhibition in SKOV-3 cells and maximal inhibition of .apprx.80% in FaDu cells). However, treatment with **telomerase** inhibitors resulted in .apprx.50% telomere shortening in FaDu cells but had no effect on SKOV-3 nor Saos-2 cells. SKOV-3 cells did not show the characteristic features of ALT (i.e. heterogeneous telomere length and promyelocytic leukemia bodies), whereas these ALT features were obsd. in Saos-2 cells. Collectively, these results suggest the existence of a **telomerase**-independent mechanism of telomere maintenance in the **telomerase**-pos. SKOV-3 cells.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(4) Counter, C; Proc Natl Acad Sci USA 1998, V95, P14723 HCAPLUS
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(6) Dunham, M; Nat Genet 2000, V26, P447 HCAPLUS
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(16) Kim, N; Science 1994, V266, P2011 HCAPLUS
(17) Lundblad, V; Cell 1993, V73, P347 HCAPLUS
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(21) Rich, T; Nature 2000, V407, P777 HCAPLUS
(22) Ritchie, K; Mol Cell Biol 1999, V19, P6065 HCAPLUS
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(24) Strahl, C; Mol Cell Biol 1996, V16, P53 HCAPLUS
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(28) Zakian, V; Science 1995, V270, P1601 HCAPLUS

L65 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2002:521462 HCAPLUS
DN 137:88442
TI Incensole and furanogermacrens and compounds in treatment for inhibiting neoplastic lesions and microorganisms
IN Shanahan-Pendergast, Elisabeth
PA Ire.
SO PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA English
IC A61K031-00
CC **1-6** (Pharmacology)
Section cross-reference(s): **10, 63**
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002053138	A2	20020711	WO 2002-IE1	20020102
	WO 2002053138	A3	20020919		

W: AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG

PRAI IE 2001-2 A 20010102
OS MARPAT 137:88442
AB The invention discloses the use of incensole and/or furanogermacrens, derivs. metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immundysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacren and their mixt. showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis.
ST neoplastic lesion treatment incensole furanogermacren compd; antitumor incensole furanogermacren; antimicrobial incensole furanogermacren
IT Proteins
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(A, immunomodulator based on, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Leukemia
Lymphoma
(B-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine, disease
(Crohn's, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Canarypox virus
(IL-2 of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT GTPase-activating protein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ras-GAP, inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Sdi 1, mimetics, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Skin, neoplasm
(Sezary syndrome; incensole and furanogermacrens and compds. as

antitumor and antimicrobial agents)
IT Leukemia
Lymphoma
(T-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Transcription factors
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(WT1 (Wilms' tumor suppressor 1), therapy based on; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Keratosis
(actinic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Leukemia
(acute; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Lung, neoplasm
(adenocarcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Melanoma
(amelanotic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Urokinase-type plasminogen activator receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Nutrients
(anti-, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-dorsalizing morphogenetic protein-1, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Androgens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiandrogens, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Estrogens
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiestrogens, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antitumor agents
(antineoplastons, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug resistance
(antitumor; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Lung, disease
(aspergillosis, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Infection
(bacterial, intracellular or extracellular, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Candida
(candidiasis from, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and

antimicrobial agents)
IT Prostate gland
(carcinoma, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Ovary, neoplasm
Stomach, neoplasm
(carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Mycobacterium
(cell wall sk and monophosphoryl lipid A, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Diterpenes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cembranoid, alcs.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Diterpenes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cembranoid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Nervous system
(central, disease, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Nervous system
(central, neoplasm; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Uterus, disease
(cervix, dysplasia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Uterus, neoplasm
(cervix; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Porphyrins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chlorins, benzo-, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Porphyrins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chlorins, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Leukemia
(chronic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(co-, enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine, neoplasm
(colon, carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine, neoplasm
(colon, polyp; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine
(colon, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine, neoplasm
(colon; incensole and furanogermacrens and compds. as antitumor and

antimicrobial agents)
IT Polyoxyalkylenes, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates with pyridoxylated Hb; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Quinones
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cyclopentanthraquinones, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Bronchi
Prostate gland
(disease, dysplasia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Mammary gland
(disease, precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Bladder
(diseases, lesions; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Immunity
(disorder, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Carbohydrates, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug delivery systems contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug targeting to HIV infected cells using; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Skin, neoplasm
(dysplastic nevus syndrome; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Dendritic cell
(enhancement of endogenous precursor; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Heat-shock proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(enhancement of endogenous; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(enteric-coated; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(enteric; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Escherichia coli
(enterohemorrhagic, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Escherichia coli
(enteroinvasive, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Escherichia coli
(enteropathogenic, treatment of immunodysregulation condition caused by

infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Escherichia coli
(enterotoxigenic, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lung, neoplasm
(epidermoid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Gene therapy
(erythrocyte, vector system, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(for apoptosis, modulators of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene BCR-ABL, antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene c-raf, antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Multidrug resistance
(gene inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Apoptosis
(gene modulators or regulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Erythrocyte
(gene therapy vector system, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Envelope proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp120env, drug targeting to HIV infected cells using antibodies to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Envelope proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gp160env, drug targeting to HIV infected cells using antibodies to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(hairy-cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(immunostimulant, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Chemotherapy
Parasiticides
Radiotherapy
Surgery

(in combination with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Adrenal gland, neoplasm
Anti-AIDS agents
Anti-infective agents
Antiarthritics
Antiasthmatics
Antidiabetic agents
Antidiarrheals
Antitumor agents
Brain, neoplasm
Burn
Drug delivery systems
Drug targeting
Enterococcus faecalis
Hodgkin's disease
Human
Lymphoma
Mammalia
Melanoma
Multiple myeloma
Neoplasm
Newborn
Ovary, neoplasm
Pancreas, neoplasm
Sarcoma
Staphylococcus aureus
Stomach, neoplasm
Testis, neoplasm
(incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Yeast
(infection with, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Intestine, disease
(inflammatory, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cartilage
(inhibitor derived from, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Insulin-like growth factor I receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Translation, genetic
(inhibitors of, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Signal transduction, biological
(inhibitors or modulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Macrophage migration inhibitory factor
Ras proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Insulin-like growth factor-binding proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(insulin-like growth factor I-binding, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as

antitumor and antimicrobial agents)
IT Parasite
(intracellular or extracellular infection with, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Gamma ray
(irradn., treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Intestine, disease
(irritable bowel syndrome, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Digestive tract
(irritation, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Paracoccidioides
(juvenile paracoccidiomyosis, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Lung, neoplasm
(large-cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Skin, disease
(lesions; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Virus
(lipid envelope, treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipophilic disaccharide, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(liposomes; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Peptides, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lytic, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Pulverization
(micronization; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Double stranded RNA
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mismatched, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antibodies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, conjugates, with liposome or carbohydrate vehicles, to tumor-assocd. antigen; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antibodies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, to human chorionic gonadotropin, pharmaceutical formulation further including; incensole and furanogermacrens and

compds. as antitumor and antimicrobial agents)
IT Leukemia
(monocytic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Lipid A
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monophosphates, and mycobacterium cell wall sk, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Nerve, disease
(motor, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Gram-positive bacteria (Firmicutes)
(multi-drug resistant; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(multidrug resistance, inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Leukemia
(myelogenous; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Leukemia
(myelomonocytic; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(nasal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Bladder
Mammary gland
Mouth
Prostate gland
(neoplasm; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Nerve, neoplasm
(neuroblastoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antioxidants
(nitroxide, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Lymphocyte
(null cell, leukemia; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Interleukin 2
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of canarypox virus, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Cytokines
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oral inducer, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(oral; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Drug delivery systems
(parenterals; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
IT Antiviral agents
(pharmaceutical formulation further contg.; incensole and

furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Angiogenesis inhibitors
Antivenoms
Cytotoxic agents
Immunostimulants
Mycobacterium bovis
Venoms
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT **Antisense oligonucleotides**
Estrogens
Heregulins
Hormones, animal, biological studies
Interleukins
Leukemia inhibitory factor
Oligonucleotides
Polyamines
Ribozymes
Steroids, biological studies
Taxanes
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Disease, animal
(polyposis syndrome; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Fatty acids, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(poppy seed-oil, Et esters, labeled with iodine-131, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Kidney, disease
Lung, disease
Stomach, disease
(precancerous lesion in; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(prodrugs; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Hemoglobins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(reaction products, with pyridoxal phosphate, conjugates with polyoxyethylene, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(rectal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Kidney, neoplasm
(renal cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antitumor agents
(resistance to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(saporins, fibroblast growth factor conjugates; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(senescence-derived inhibitor 1, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT **Oligonucleotides**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sense, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Shock (circulatory collapse)
(septic, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(single chain antigen binding protein, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell wall
(sk of mycobacteria and monophosphoryl lipid A, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Leukemia
(small cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lung, neoplasm
(small-cell carcinoma; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Neoplasm
(solid; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Carcinoma
(squamous cell; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell
(stem, division inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cell
(stem, inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(sublingual; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Glycosaminoglycans, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synthetic, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lupus erythematosus
(systemic, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Human immunodeficiency virus
(targeting to cells infected with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(thymopoietin, agonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(topical; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Stem cell factor
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(totipotent, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Adeno-associated virus
Balantidium
Balantidium coli
Borrelia
Campylobacter
Candida
Coronavirus
Cryptococcus (fungus)
Cryptosporidium
DNA viruses
Entamoeba
Entamoeba histolytica
Filovirus
Flavivirus
Haemophilus
Hantavirus
Human papillomavirus
Human parainfluenza virus
Human poliovirus
Influenza virus
Legionella
Leishmania
Leishmania braziliensis
Leishmania donovani
Leishmania mexicana
Leishmania tropica
Listeria
Measles virus
Mycoplasma
Papillomavirus
Pestivirus
Picornaviridae
Plasmodium berghei
Plasmodium falciparum
Plasmodium malariae
Plasmodium ovale
Plasmodium vivax
Pneumocystis
Pneumocystis carinii
Poxviridae
Pseudomonas
RNA viruses
Respiratory syncytial virus
Retroviridae
Rhinovirus
Rubivirus
Salmonella
Shigella
Staphylococcus
Streptococcus
Togaviridae

Toxoplasma
Toxoplasma gondii
Trichomonas
Trichomonas vaginalis
Trypanosoma
Trypanosoma brucei
Trypanosoma cruzi
Trypanosoma gambiense
Trypanosoma rhodesiense
Vibrio
Yersinia
(treatment of immunodysregulation condition caused by infection with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Corticosteroids, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Nucleoside analogs
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Immunosuppressants
Mycosis
Protozoa
Wound
(treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Arthritis
Asthma
Autoimmune disease
Cachexia
Cirrhosis
Diabetes mellitus
Diarrhea
Multiple sclerosis
Respiratory distress syndrome
(treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tumor-assocd., drug targeting with monoclonal antibody to; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Hematopoietic precursor cell
(tumors; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Cytotoxic agents
(tyrphostins, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Drug delivery systems
(vaginal; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Infection
(viral, treatment of immunodysregulation condition caused by; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Disease, animal
(wasting, treatment of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(.alpha., n1, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha., n3, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha., pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-2a, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-2b, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Lactams
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.1, a, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT Interferons
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.gamma., 1b, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 37221-79-7, Vasoactive intestinal peptide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antagonist, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 9002-06-6, Thymidine kinase
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antagonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 505-60-2, Mustard
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 7585-39-9, .beta.-Cyclodextrin 7585-39-9D, .beta.-Cyclodextrin, hydroxypropyl derivs. 10016-20-3, .alpha.-Cyclodextrin 12619-70-4, Cyclodextrin 17465-86-0, .gamma.-Cyclodextrin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as pharmaceutical carrier; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 80-62-6, Methyl methacrylate 2867-47-2, (2-Dimethylaminoethyl) methacrylate 9004-38-0, Cellulose acetate phthalate 34346-01-5, Poly(lactic acid-glycolic acid) 441015-98-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(enteric coating of; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 121749-39-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(epharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 54-47-7D, Pyridoxal phosphate, reaction products with Hb conjugates 76-49-3, Bornyl acetate 80-57-9, Verbenone 87-44-5, .beta.-Caryophyllene 88-84-6, .beta.-Guaiene 99-49-0, Carvone 99-83-2, .alpha.-Phellandrene 99-87-6, p-Cymene 112-14-1, Octyl acetate 123-35-3, Myrcene 473-11-0, Eudesmane 489-80-5, Guaiane 495-61-4, .beta.-Bisabolene 502-61-4, Farnesene 507-70-0, Borneol 511-59-1, .beta.-Santalene 512-61-8, .alpha.-Santalene 515-12-8, Elemane 523-47-7, .beta.-Cadinene 555-10-2, .beta.-Phellandrene 562-74-3, Terpinen-4-ol 1335-14-4 1674-08-4, trans-Pinocarveol 1820-09-3, trans-Ver-benol 2867-05-2, .alpha.-Thujene 3856-25-5, .alpha.-Copaene 4602-84-0, Farnesol 5208-59-3, .beta.-Bourbonene 6753-98-6, Humulene 6895-56-3, .beta.-Bergamotene 7663-66-3, Bergamotane 8007-35-0, Terpinyl acetate 8013-00-1, Terpinene 10178-38-8, Echinodol 14998-63-1D, Rhenium-186, etidronate complexes, biological studies 17627-44-0, .alpha.-Bisabolene 18794-84-8, .beta.-Farnesene 19912-61-9, Furanodiene 20479-06-5, .beta.-Ylangene 21698-66-8, Incensole oxide 21698-67-9, Incensole oxide acetate 22419-74-5, Incensole 25269-16-3, Isocembrene 25322-68-3D, conjugates with pyridoxylated Hb 28028-64-0, Germacrene 29063-28-3, Octanol 29350-73-0, Cadinene 31570-39-5, Cembrene-A 34701-53-6 35731-88-5, Isoincensole oxide 67921-02-2, Cembrenol 94325-73-2 94325-73-2D, compds. 122537-31-9, Oplopane 441771-56-8, Isoincensole 441771-57-9, Isoincensole acetate 441771-74-0, SKB 4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 141436-78-4, Protein kinase C
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitor, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 52660-18-1, Casein kinase 1 366806-33-9, Casein kinase 2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors (ICOS), pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 144114-21-6, HIV-1 Protease
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 70-18-8, Glutathione, biological studies 9030-21-1, Purine nucleoside phosphorylase 9040-48-6, Gelatinase 79747-53-8, Protein tyrosine phosphatase 79955-99-0, Stromelysin 80449-02-1, Tyrosine kinase 106096-93-9, Basic fibroblast growth factor **120178-12-3**, **Telomerase** 131384-38-8, Ras farnesyltransferase 140879-24-9, Proteasome 141256-52-2, Matrilysin 141907-41-7, Matrix metalloproteinase 375798-61-1, Phosphatase, phosphoprotein
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 10102-43-9, Nitric oxide, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(modulators, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 9002-61-3, Chorionic gonadotrophin
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(monoclonal antibody to human, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 9068-38-6, Reverse transcriptase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nonnucleoside inhibitors of, pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 1406-18-4, Vitamin E
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oil, as pharmaceutical carrier; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 54-05-7, Chloroquine 54-42-2, Idoxuridine 60-54-8, Tetracycline 69-74-9, Cytarabine Hydrochloride 70-00-8, Trifluridine 80-08-0, Dapsone 90-34-6, Primaquine 100-33-4, Pentamidine 130-95-0, Quinine 443-48-1, Metronidazole 494-79-1, Melarsoprol 665-66-7, Amantadine Hydrochloride 1501-84-4, Rimantadine Hydrochloride 1910-68-5, Methisazone **3056-17-5, d4T** 3736-81-0, Diloxanide furoate 5536-17-4, Vidarabine 7481-89-2, DdC 8064-90-2 9004-70-0, HE-2000 10500-82-0, Famotine Hydrochloride 10540-97-3, Memotine Hydrochloride 11006-77-2, Statolon 15176-29-1, Edoxudine 15185-43-0, DOTC 19387-91-8, Tinidazole 19885-51-9, Aranotin 22994-85-0, Benznidazole 23256-30-6, Nifurtimox 25526-93-6, Alovudine 27591-69-1, Tilorone Hydrochloride 27762-78-3, Kethoxal 29984-33-6, Vidarabine Phosphate **30516-87-1, AZT** 35607-20-6, Avridine 36791-04-5, Ribavirin 36983-81-0, Fosfonet Sodium 37338-39-9 39809-25-1, Penciclovir 51867-87-9 53230-10-7, Mefloquine 56219-57-9, Arildone 59277-89-3, Acyclovir 63198-97-0, Viroxime 63585-09-1, Foscarnet Sodium 63968-64-9D, Artemisinin, derivs. 68693-30-1, Somantadine Hydrochloride 69123-90-6, Fiacitabine 69123-98-4, Fialuridine 69655-05-6, DdI 69657-51-8, Acyclovir Sodium 69756-53-2, Halofantrine 72301-78-1, Zinviroxime 72301-79-2, Enviroxime 73514-87-1, Fosarilate 77181-69-2, Sorivudine 80883-55-2, Enviradene 82410-32-0, Ganciclovir 84408-37-7, Desciclovir 85087-20-3, Doxycycline 87495-31-6, Disoxaril 95233-18-4, Atovaquone 100817-46-7, Stibogluconic acid 104227-87-4, Famciclovir 106362-32-7, Peptide T 106941-25-7, PMEA 107910-75-8, Ganciclovir Sodium 110042-95-0, Acemannan 110143-10-7, Lodenosine 113852-37-2, Cidofovir 124436-59-5, Pirodavir 124832-27-5, Valacyclovir Hydrochloride 127759-89-1, Lobucavir 127779-20-8, Saquinavir 129618-40-2, Nevirapine 132210-43-6, Cipamfylline 134678-17-4, 3TC 136470-78-5, Abacavir 136817-59-9, Delavirdine 137487-62-8, Alvircept Sudotox 138540-32-6, Atevirdine Mesylate 141204-94-6, Co-artemether 142340-99-6 142632-32-4, Calanolide A 143491-57-0, Coviracil 145514-04-1, DAPD 147127-20-6, Tenofovir 147221-93-0, Delavirdine Mesylate 147318-81-8, KNI-272 147362-57-0, Loviride 149845-06-7, Saquinavir Mesylate 149950-60-7, Emivirine 150378-17-9, Indinavir 153127-49-2, ALX40-4C 154598-52-4, DMP 266 155148-31-5, AMD 3100 155213-67-5, Ritonavir 156879-70-8 159519-65-0, Pentafuside 159989-64-7, Nelfinavir 163451-80-7 170020-61-8, FP-21399 174484-41-4, Tipranavir 177932-89-7, DMP-450 178979-85-6, AG 1549 185220-03-5, PNU142721 192725-17-0, ABT-378 214287-88-4, DPC961 216863-66-0, L-756423 251562-00-2, T-1249 383198-56-9, BW 141 383198-57-0, BMS-232630 383198-58-1, PRO 542
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 50-18-0, Cyclophosphamide 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 50-76-0, Dactinomycin 50-91-9, Floxuridine 51-21-8, Fluorouracil 51-75-2, Mechlorethamine 52-24-4, Thiotepa 53-19-0, Mitotane 53-43-0, DHEA 53-79-2, Puromycin 54-71-7, Pilocarpine hydrochloride 54-91-1, Pipobroman 55-21-0D, Benzamide,

N-substituted compds. 55-86-7, Mechlorethamine Hydrochloride 55-86-7D, Nitrogen mustard, derivs. 55-98-1, Busulfan 56-53-1, Diethylstilbestrol 57-22-7, Vincristine 57-63-6, Ethinyl oestradiol 57-83-0, Progesterone, biological studies 58-05-9, Leucovorin 58-58-2, Puromycin Hydrochloride 59-05-2, Methotrexate 66-75-1, Uracil Mustard 83-89-6, Acriquine 101-60-0, Porphyrin 106-60-5, Aminolevulinic acid 114-70-5, Sodium phenylacetate 122-79-2, Phenylacetate 125-45-1, Azetepa 125-84-8, Aminoglutethimide 127-07-1, Hydroxyurea 143-67-9, Vinblastine Sulfate 145-63-1, Suramin 147-94-4, Cytarabine 148-82-3, Melphalan 154-42-7, Thioguanine 154-93-8, Carmustine 302-49-8, Uredepa 302-79-4, Tretinoin 305-03-3, Chlorambucil 320-67-2, Azacitidine 359-83-1, Pentazocine 364-62-5, Metoclopramide 366-70-1, Procarbazine Hydrochloride 378-44-9, Betamethasone 423-55-2, Perflubron 459-86-9, Mitoguazone 465-65-6, Naloxone 472-15-1, Betulinic acid 481-29-8, Epiandrosterone 518-28-5, Podophyllotoxin 520-85-4, Medroxyprogesterone 521-12-0, Dromostanolone Propionate 536-59-4, Perillyl alcohol 548-04-9, Hypericin 566-48-3, Formestane 569-57-3, Chlorotrianisene 578-95-0D, Acridone, imidazo derivs. 578-95-0D, Acridone, propylbis derivs. 595-33-5, Megestrol Acetate 645-05-6, Altretamine 646-08-2, .beta.-Alethine 671-16-9, Procarbazine 801-52-5, Porfiromycin 865-21-4, Vinblastine 911-45-5, Clomifene 968-93-4, Testolactone 1271-19-8, Titanocene dichloride 1402-81-9, Ambomycin 1403-47-0, Duazomycin 1403-99-2, Mitogillin 1404-00-8, Mitomycin 1404-15-5, Nogalamycin 1404-20-2, Peliomycin 1404-64-4, Sparsomycin 1661-29-6, Meturedepa 1972-08-3, Dronabinol 1980-45-6, Benzodepa 2068-78-2, Vincristine Sulfate 2353-33-5, Decitabine 2608-24-4, Piposulfan 2809-21-4D, Etidronic acid, rhenium-186 complexes 2919-66-6, Melengestrol acetate 2998-57-4, Estramustine 2998-57-4D, Estramustine, analogs 3073-59-4, Hexamethylene bisacetamide 3094-09-5, Doxifluridine 3562-63-8, Megestrol 3778-73-2, Ifosfamide 3930-19-6, Streptonigrin 4105-38-8 4291-63-8, Cladribine 4342-03-4, Dacarbazine 4342-07-8 4803-27-4, Anthramycin 5072-26-4, Buthionine sulfoximine 5373-42-2, Thaliblastine 5508-58-7, Andrographolide 5579-27-1, Simtrazene 5581-52-2, Thiamiprine 5696-17-3, Epipropidine 6157-87-5, Trestolone Acetate 7281-31-4, Vinglycinate Sulfate 7440-06-4D, Platinum, lipophilic compds. or complexes 7440-06-4D, Platinum, triamine complexes 7644-67-9, Azotomycin 7689-03-4D, Camptothecin, derivs. 7724-76-7, Riboprine 7761-45-7, Metoprine 8052-16-2, Cactinomycin 9002-71-5, Thyroid-stimulating hormone 9014-02-2, Zinostatin 9014-42-0, Thrombopoietin 9014-42-0D, Thrombopoietin, mimetics 9015-68-3, Asparaginase 9027-98-9 9041-93-4, Bleomycin Sulfate 9050-67-3, Sizofiran 10043-49-9, Gold-198, biological studies 10087-89-5, Enpromate 10318-26-0, Mitolactol 10403-51-7, Mitindomide 10540-29-1, Tamoxifen 11002-22-5, Apurinic acid 11029-06-4, Elemene 11043-98-4, Mitocromin 11043-99-5, Mitomalcin 11056-06-7, Bleomycin 11056-12-5, Cirolemycin 11056-14-7, Mitocarcin 11056-15-8, Mitosper 12713-07-4D, Verdin, compds. 13010-47-4, Lomustine 13311-84-7, Flutamide 13494-90-1, Gallium nitrate 13665-88-8, Mopidamol 13909-09-6, Semustine 14769-73-4, Levamisole 15475-56-6, Methotrexate Sodium 15639-50-6, Safingol 15663-27-1, Cisplatin 17021-26-0, Calusterone 17902-23-7, Tegafur 18378-89-7, Plicamycin 18416-85-8, Lombricine 18556-44-0, Vinrosidine Sulfate 18588-57-3, Etoprine 18883-66-4, Streptozocin 19916-73-5, O6-Benzylguanine 20098-14-0, Idramantone 20537-88-6, Amifostine 20638-84-0, Retinamide 20830-81-3, Daunorubicin 21059-48-3, Veramine 21679-14-1, Fludarabine 22668-01-5, Etanidazole 23214-92-8, Doxorubicin 23541-50-6, Daunorubicin Hydrochloride 23593-75-1, Clotrimazole 24280-93-1, Mycophenolic Acid 24584-09-6, Dexrazoxane 25316-40-9, Adriamycin 27302-90-5, Oxisuran 27314-97-2, Tirapazamine 27548-93-2D, Baccatin III, derivs. 27686-84-6, Masoprocol 29069-24-7, Prednimustine 29767-20-2, Teniposide 30303-65-2, Docosanol 30387-51-0, Asperlin 30868-30-5, Pyrazofurin 31430-18-9, Nocodazole 31441-78-8, Mercaptopurine 32954-58-8, Ipomeanol **33069-62-4**,

Paclitaxel 33069-62-4D, Paclitaxel, analogs
and derivs. 33419-42-0, Etoposide 35301-24-7, Cedefingol 35846-53-8,
Maytansine 35943-35-2, Triciribine 36508-71-1, Zorubicin Hydrochloride
37717-21-8, Flurocitabine 38270-90-5, Strontium Chloride Sr 89
38321-02-7, Dexverapamil 39325-01-4, Picibanil 40391-99-9, Pamidronic
acid 41575-94-4, Carboplatin 41729-52-6, Dezaguanine 41992-22-7,
Spirogermanium Hydrochloride 42228-92-2, Acivicin 42616-25-1,
Methioninase 50264-69-2, Lonidamine 51264-14-3, Amsacrine
51321-79-0, Sparfosic acid 52128-35-5, Trimetrexate 52205-73-9,
Estramustine Phosphate Sodium 52794-97-5, Carubicin Hydrochloride
53643-48-4, Vindesine 53714-56-0, Leuprolide 53910-25-1, Pentostatin
54081-68-4, Vinleurosine Sulfate 54824-17-8, Mitonafide 55435-65-9,
Acodazole Hydrochloride 56390-09-1, Epirubicin Hydrochloride
56420-45-2, Epirubicin 56605-16-4, Spiromustine 56741-95-8,
Bropirimine 57381-26-7, Irsogladine 57576-44-0, Aclarubicin
57773-63-4, Triptorelin 57773-65-6, Deslorelin 57852-57-0, Idamycin
57998-68-2, Diaziquone 58066-85-6, Miltefosine 58525-82-9, Azatyrosine
58957-92-9, Idarubicin 58970-76-6, Ubenimex 59653-73-5, Teroxirone
59917-39-4, Vindesine Sulfate 59989-18-3, 5-Ethynyluracil 60084-10-8,
Tiazofurin 60203-57-8, Prostaglandin J2 60940-34-3, Ebselen
61825-94-3, Oxaliplatin 61966-08-3, Triciribine Phosphate 62304-98-7,
Thymalfasin 62435-42-1, Perfosfamide 62488-57-7 62816-98-2,
Ormaplatin 62928-11-4, Iproplatin 63590-19-2, Balanol 63612-50-0,
Nilutamide 63950-06-1, Esorubicin Hydrochloride 65057-90-1,
Talisomycin 65093-40-5, Cytarabine ocfosfate
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and
furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 65222-35-7, Pazelliptine 65271-80-9, Mitoxantrone 65646-68-6,
Fenretinide 65807-02-5, Goserelin 65886-71-7, Fazarabine 66569-27-5,
Sparfosate Sodium 66849-34-1, Dexifosfamide 67699-41-6, Vinzolidine
Sulfate 68278-23-9, Eflornithine Hydrochloride 68475-42-3, Anagrelide
69839-83-4, Didox 70052-12-9, Eflornithine 70384-29-1, Peplomycin
Sulfate 70476-82-3, Mitoxantrone Hydrochloride 70641-51-9, Edelfosine
70711-40-9, Ametantrone Acetate 71294-60-5, Rohitukine 71439-68-4,
Bisantrene Hydrochloride 71486-22-1, Vinorelbine 71522-58-2,
Forfenimex 71628-96-1, Menogaril 72238-02-9D, Retelliptine, demethyl
derivs. 72496-41-4, Pirarubicin 72629-69-7, Sarcophytol A
72732-56-0, Piritrexim 72741-87-8, Swainsonine 73105-03-0,
Pentamustine 74149-70-5, Parabactin 74349-48-7, Mutamycin
74381-53-6, Leuprolide Acetate 74790-08-2, Spiroplatin 75219-46-4,
Atrimustine 75330-75-5, Lovastatin 75607-67-9, Fludarabine Phosphate
75775-33-6D, Purpurin, compds. 75957-60-7, Splenopentin 76932-56-4,
Nafarelin 77016-85-4, Plomestane 77327-05-0, Didemnin B 77599-17-8,
Panomifene 77858-21-0, Velaresol 78113-36-7, Romurtide 78186-34-2,
Bisantrene 79778-41-9, Neridronic acid 79831-76-8, Castanospermine
80451-05-4, Cecropin B 80576-83-6, Edatrexate 80663-95-2 80841-47-0,
Asulacrine 81424-67-1, Caracemide 81965-43-7, SarCNU 82230-03-3,
Carbetimer 82413-20-5, Droloxifene 82707-54-8, Neutral endopeptidase
82855-09-2D, Combretastatin, analogs 82952-64-5, Trimetrexate
Glucuronate 83086-73-1, Tubulozole Hydrochloride 83150-76-9,
Octreotide 83200-11-7, Vinepidine Sulfate 83519-04-4, Ilmofosine
83997-75-5, Iododoxorubicin 84030-84-2, Telluropyrylium 84088-42-6,
Roquinimex 84371-65-3, Mifepristone 84412-94-2, Ruboxyl 85465-82-3,
Thymotrinan 85622-93-1, Temozolomide 85754-59-2, Ambamustine
85969-07-9, Budotitane 85977-49-7, Tauromustine 86976-56-9,
Betaclamycins 87005-03-6, Panaxytriol 87434-82-0, Dezaguanine Mesylate
87806-31-3, Porfimer Sodium 87810-56-8, Fostriecin 87860-39-7,
Fostriecin Sodium 88303-60-0, Losoxantrone 88303-61-1, Losoxantrone
Hydrochloride 89565-68-4, Tropisetron 89778-26-7, Toremifene
89778-27-8, Toremifene Citrate 90357-06-5, Bicalutamide 90996-54-6,
Rhizoxin 92047-76-2, Tetrachlorodecaoxide 92118-27-9, Fotemustine

92788-10-8, Rogletimide 92803-82-2, Aphidicolin glycinate 94079-80-8, Cicaprost 95058-81-4, Gemcitabine 95734-82-0, Nedaplatin 95933-72-5, Amidox 96201-88-6, Brequinar Sodium 96301-34-7, Atamestane 96346-61-1, Onapristone 96389-68-3, Crisnatol 96389-69-4, Crisnatol Mesylate 96392-96-0, Dexormaplatin 96892-57-8, Hepsulfam 97068-30-9, Elsamitrucin 97534-21-9, Merbarone 97682-44-5, Irinotecan 97752-20-0, Droloxifene Citrate 97919-22-7 98319-26-7, Finasteride 98383-18-7, Ecomustine 98631-95-9, Sobuzoxane 99009-20-8, Pyrazoloacridine 99011-02-6, Imiquimod 99283-10-0, Molgramostim 99614-02-5, Ondansetron 100286-90-6, Irinotecan Hydrochloride 100324-81-0, Lisofylline 102396-24-7, Jasplakinolide 102676-31-3, Fadrozole Hydrochloride 102676-47-1, Fadrozole 102822-56-0, Mannostatin A 103222-11-3, Vapreotide 103612-80-2 104493-13-2, Adecypenol 105118-12-5, Piroxantrone Hydrochloride 105149-04-0, Osaterone 105615-58-5, Oxaunomycin 105844-41-5, Plasminogen activator inhibitor 106096-93-9D, Basic Fibroblast growth factor, saporin conjugates 106400-81-1, Lometrexol 107000-34-0, Zanoterone 107256-99-5, Tamoxifen methiodide 107868-30-4, Exemestane 108736-35-2, Lanreotide 108852-90-0, Nemorubicin 109837-67-4, Cycloplatam 110267-81-7, Amrubicin 110311-27-8, Sulofenur 110314-48-2, Adozelesin 110690-43-2, Emitefur 110942-02-4, Aldesleukin 110942-08-0, Luprolide 111490-36-9, Zeniplatin 111523-41-2, Enloplatin 112515-43-2, Topsentin 112522-64-2, Acetyldinaline 112809-51-5, Letrozole 112859-71-9, Fluasterone 112887-68-0, Raltitrexed 112965-21-6, Calcipotriol 114084-78-5, Ibandronic acid 114285-68-6, Lentinan sulfate 114517-02-1, Fosquidone 114977-28-5, Taxotere 115150-59-9, Antagonist G 115308-98-0, Tallimustine 115566-02-4, Bistratene A 115575-11-6, Liarozole 115956-12-2, Dolasetron 116057-75-1, Idoxifene 117048-59-6, Combretastatin A4 117091-64-2, Etoposide Phosphate 118292-40-3, Tazarotene 119169-78-7, Epristeride 119413-54-6, Topotecan Hydrochloride 119813-10-4, Carzelesin 120287-85-6, Cetrorelix 120408-07-3, Lometrexol Sodium 120500-15-4, Leinamycin 120511-73-1, Anastrozole 120685-11-2, Benzoylstaurosporine 121181-53-1, Filgrastim 121263-19-2, Calphostin C 121288-39-9, Loxoribine 121547-04-4, Mirimostim 122111-03-9, Gemcitabine Hydrochloride 122341-38-2, Temoporfin 122431-96-3 122898-63-9, Phenazinomycin 123040-69-7, Azasetron 123258-84-4, Itasetron 123760-07-6, Zinostatin stimalamer 123774-72-1, Sargramostim 123830-79-5, Teloxantrone Hydrochloride 123948-87-8, Topotecan 124012-42-6, Galocitabine 124689-65-2D, Cryptophycin A, derivs. 124784-31-2, Erbulozole 124904-93-4, Ganirelix 125317-39-7, Vinorelbine Tartrate 125392-76-9, Acylfulvene 125533-88-2, Mofarotene 126297-39-0, Lissoclinamide 7 126443-96-7, Napavin 127984-74-1, Lanreotide Acetate 128505-88-4, Naphterpin 128768-09-2, Placetin A 128768-11-6, Placetin B 129497-78-5, Verteporfin 129564-92-7, Azatoxin 129655-21-6, Bizelesin 129731-10-8, Vorozole 130167-69-0, Pegaspargase 130288-24-3, Duocarmycin SA 130364-39-5, Rubiginone B1 130370-60-4, Batimastat 131190-63-1, Saintopin 132036-88-5, Ramosetron 132073-72-4, Tetrazomine 133432-71-0, Peldesine 134088-74-7, Nartograstim 134381-30-9, Conagenin 134523-84-5 134633-29-7, Tecogalan Sodium 134861-62-4, Dioxamycin 135257-45-3, Crambescidin 816 135381-77-0, Flezelastine 135383-02-7, Stipiamide 135558-11-1, Lobaplatin 135819-69-1 135968-09-1, Lenograstim 137018-54-3, Okicenone 137099-09-3, Turosteride 137219-37-5, Dehydrodidemnin B 137647-92-8, Axinastatin 1 137964-32-0 139755-79-6, Safingol Hydrochloride 140207-93-8, Pentosan polysulfate sodium 140703-49-7, Meterelin 142880-36-2, Ilomastat 144885-51-8, Sodium borocaptate 144916-42-7, Sonermin 145124-30-7, Bisnafide dimesylate 145858-50-0, Liarozole Hydrochloride 146426-40-6, Flavopiridol 148317-76-4, Oracin 148584-53-6 148717-58-2, Palauamine 148717-90-2, Squalamine 149204-42-2, Kahalalide F 149260-80-0, Mycaperoxide B 149355-77-1, Lamellarin-N triacetate
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 149633-91-0, Leptolstatin 149715-96-8, Spongistatin 1 149882-10-0, Lurtotecan 150829-93-9, Nisamycin 151272-78-5, Antarelix 152923-56-3, Dacliximab 153723-34-3, Axinastatin 2 153723-35-4, Axinastatin 3 154039-60-8, Marimastat 154229-19-3, Abiraterone 154248-96-1, Iroplact 154277-21-1, Cypemycin 154361-50-9, Capecitabine 155233-30-0, Curacin A 156586-89-9, Edrecolomab 156790-85-1, Variolin B 156856-30-3, Cytostatin 157078-48-3, Isohomohalichondrin B 157857-21-1, Maspin 158792-24-6, Collismycin A 158792-25-7, Collismycin B 168482-36-8, Cryptophycin 8 172793-30-5 173046-02-1, Thiocoraline 174305-65-8, Breflate 181887-82-1, Nitrullin 188364-40-1, CARN 700 200139-38-4, Suradista 212894-59-2, Pentrozole 246252-04-0, Lutetium texaphyrin 246252-06-2, Gadolinium texaphyrin 284041-10-7 324740-00-3, Vitaxin 441070-87-7, 1,2,3-Triazolecarboxamide 441070-88-8 441070-92-4 441772-39-0, Isobengazole 441772-43-6, Nagrestip 441772-66-3, Vinxaltine 441772-81-2, Sulfmosine 441774-07-8, Spicamycin D 441774-77-2, Solverol
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 60529-76-2, Thymopoietin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(receptor agonists, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 79217-60-0, Cyclosporin
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT 50-07-7, Mitomycin C 1397-89-3, Amphotericin B
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of immunodysregulation condition caused by treatment with; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

IT **120178-12-3, Telomerase**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors, pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

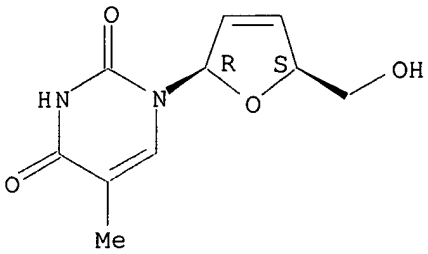
RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **3056-17-5, d4T 30516-87-1, AZT**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further contg.; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)

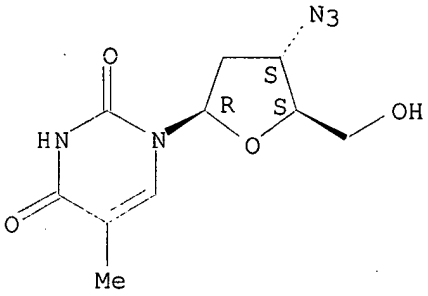
RN 3056-17-5 HCAPLUS
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



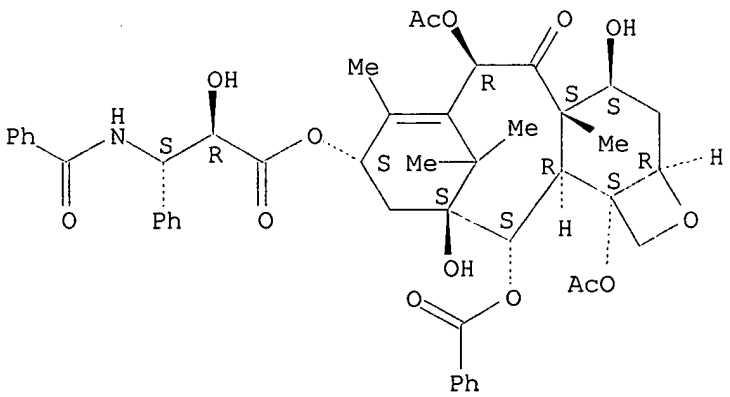
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT **33069-62-4, Paclitaxel 33069-62-4D,**
Paclitaxel, analogs and derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further including; incensole and furanogermacrens and compds. as antitumor and antimicrobial agents)
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

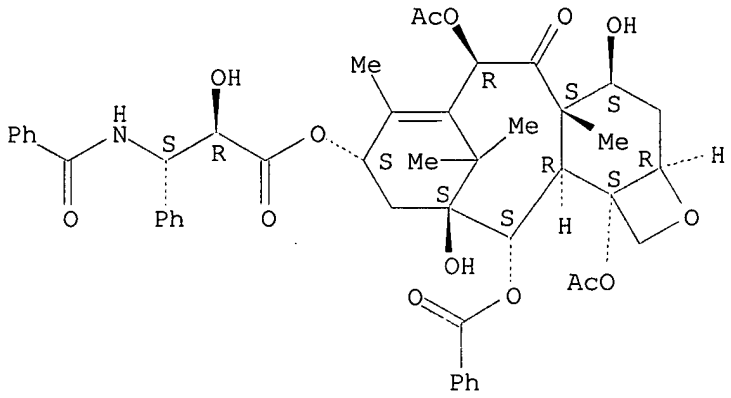
Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-,

(2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:494413 HCAPLUS
DN 135:207259
TI A quantitative assay of **telomerase** activity
AU Gan, Yuebo; Lu, Jie; Johnson, Andy; **Wientjes, M. Guillaume**; Schuller, David E.; **Au, Jessie L.-S.**
CS College of Pharmacy, The Ohio State University, Columbus, OH, 43210, USA
SO Pharmaceutical Research (2001), 18(4), 488-493
CODEN: PHREEB; ISSN: 0724-8741
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
CC 7-1 (Enzymes)
Section cross-reference(s): 14
AB Purpose: **Telomerase** is a ribonucleoprotein that extends telomeres at the ends of chromosome. Increased **telomerase** activity is assocd. with cellular immortality. The currently available assay for **telomerase**, i.e., telomeric repeat amplification protocol (TRAP), consists of 2 steps: (a) **telomerase**-mediated extension of an oligonucleotide primer by the enzyme-contg. exts. of cells and tissues, and (b) amplification of the **telomerase**-extended primer products by polymerase chain reaction (PCR) and detection of the PCR products. It is generally accepted that the current TRAP assay lacks quant. precision. The present study was to develop a quant. **telomerase** assay with greater precision and sensitivity. Methods: This new method used the primer extension method as in TRAP, plus the following modifications: (a) used a lysis buffer that yielded complete lysis of nuclei; (b) removal of PCR inhibitors by phenol/chloroform extn. after primer extension; and (c) used primers for the internal std. that were designed to reduce their competition with the **telomerase** products for PCR. Results: The modified method showed a good correlation ($r^2 = 0.99$, $P < 0.001$) between **telomerase** amt. (expressed as total protein in cell lysate) and its activity (expressed as **telomerase** products). Compared to the conventional TRAP, the new method (a) was more sensitive (av. of 5.5-fold in cultured cancer cells and >5.9-fold in patient tumors), (b) had a lower inter- and intra-day variability (>3-fold), and (c) showed a 2 to 4-fold broader range of linearity in the std. curve. The higher assay sensitivity further enabled the use of a non-radioactive method, i.e., ethidium bromide staining of

DNA, to detect the TRAP products, as opposed to the use of radioactive nucleotide and the more labor-intensive autoradiog. mandated by the conventional TRAP. Conclusion: We report here a quant. assay for **telomerase** activity in cultured human cancer cells and patient tumors.

ST **telomerase** detn modified TRAP assay; telomeric repeat amplification protocol modified detn **telomerase**

IT Genetic methods
(TRAP (telomeric repeat amplification protocol), improved; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT Neoplasm
(**telomerase** content; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT **120178-12-3, Telomerase**
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
(quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

IT 1239-45-8, Ethidium bromide
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(staining; quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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IT **120178-12-3, Telomerase**
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
(quant. assay of **telomerase** activity using a modified telomeric repeat amplification protocol (TRAP))

RN 120178-12-3 HCAPLUS

CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L65 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:880951 HCAPLUS

DN 134:37011

TI Methods and compositions for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity

IN **Au, Jessie L.-S.; Wientjes, Guillaume**

PA USA

SO PCT Int. Appl., 97 pp.

CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-00
CC **1-6** (Pharmacology)
Section cross-reference(s): 3, 7, **63**
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000074667	A2	20001214	WO 2000-US15544	20000605 <--

PI WO 2000074667 A2 20001214 WO 2000-US15544 20000605 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-137549P P 19990604 <--

AB Methods and compns. are provided for modulating the activity of therapeutic agents for the treatment of a cancer by administering one or more agents that (either alone or in combination) induces **telomere** damage and inhibits **telomerase** activity in the cancer cell. The method initially uses, e.g., a **telomere** damage-inducing agent such as **paclitaxel**, and a **telomerase** inhibitory agent such as **AZT**. The invention also provides methods for identifying other agents with **telomere** damage-inducing activity and/or **telomerase** inhibitory activity (as well as and compns. having such activity), for use in the treatment of cancer.

ST antitumor **telomere** damage **telomerase** inhibition; **paclitaxel AZT telomere telomerase** antitumor

IT **Nucleotides, biological studies**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(analogs; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Nucleic acids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antisense; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(bladder carcinoma; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(brain; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Bladder
(carcinoma, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Intestine, neoplasm
(colon, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(colon; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT DNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(complexes, with histones; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Drug delivery systems
(controlled-release; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Gelatins, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(crosslinked; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Histones
Nucleoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(deoxyribonucleohistones; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Liver, neoplasm
(hepatoma, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Antitumor agents
(hepatoma; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Nucleic acid hybridization
(in situ, fluorescence; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Brain, neoplasm
Lung, neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Testis, neoplasm
Uterus, neoplasm
(inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Antitumor agents
(leukemia; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Antitumor agents
(lung; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Antitumor agents
(mammary gland; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
IT Antitumor agents
Apoptosis
Cytotoxic agents
Drug delivery systems

Drug interactions
Drug resistance
Drug screening
Extraction
Fluorescent substances
Hyperplasia
Hypertrophy
Nucleic acid hybridization
PCR (polymerase chain reaction)
Radiotherapy
Telomeres (chromosome)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Primers (nucleic acid)
Probes (nucleic acid)
Radionuclides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(microparticles; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(nanoparticles; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Mammary gland
Pharynx
Prostate gland
(neoplasm, inhibitors; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(ovary; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(pancreas; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(prostate gland; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug delivery systems
(sustained-release; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Drug interactions
(synergistic; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Genetic methods
(**telomere** amt. and length assay (TALA); methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Genetic methods
(**telomeric** repeat amplification protocol (TRAP); methods and compns. for modulating antitumor drug activity through **telomere**

damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(testis; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT Antitumor agents
(uterus; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT **120178-12-3, Telomerase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT **3056-17-5, d4T** 15663-27-1, Cisplatin
30516-87-1, AZT 33069-62-4, Paclitaxel
33069-62-4D, Paclitaxel, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT 9055-67-8 169592-56-7, Caspase 3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT 67-66-3, Chloroform, miscellaneous 108-95-2, Phenol, miscellaneous
123-51-3, Isoamyl alcohol
RL: MSC (Miscellaneous)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT 117490-04-7 125478-80-0 167976-62-7 167976-64-9 312653-01-3
312653-02-4 312653-03-5 312653-04-6
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT 9075-08-5, Restriction endonuclease 81295-18-3 81295-20-7, Restriction endonuclease HhaI 81295-23-0, Restriction endonuclease HinfI
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

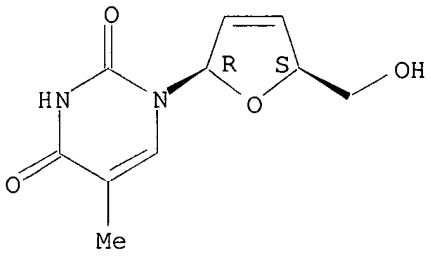
IT 119456-37-0 156960-31-5, DNA (universal primer BB22) 182036-73-3
RL: PRP (Properties)
(unclaimed nucleotide sequence; methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)

IT **120178-12-3, Telomerase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for

detecting **telomerase** activity)
RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

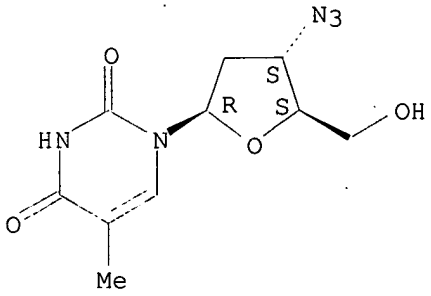
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **3056-17-5, d4T 30516-87-1, AZT**
33069-62-4, Paclitaxel 33069-62-4D,
Paclitaxel, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for modulating antitumor drug activity through **telomere** damage, agent identification method, and method for detecting **telomerase** activity)
RN 3056-17-5 HCAPLUS
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



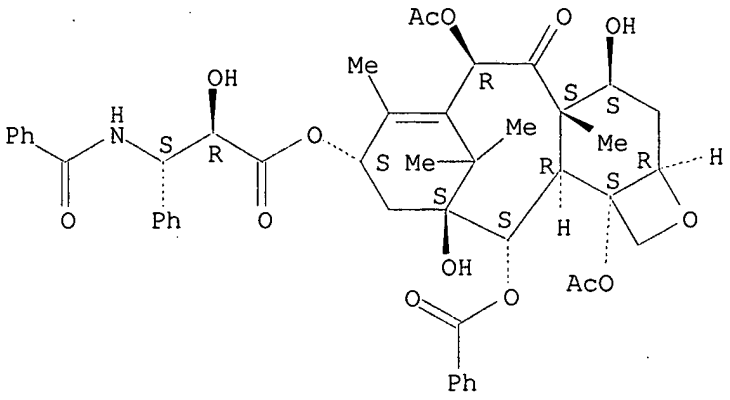
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



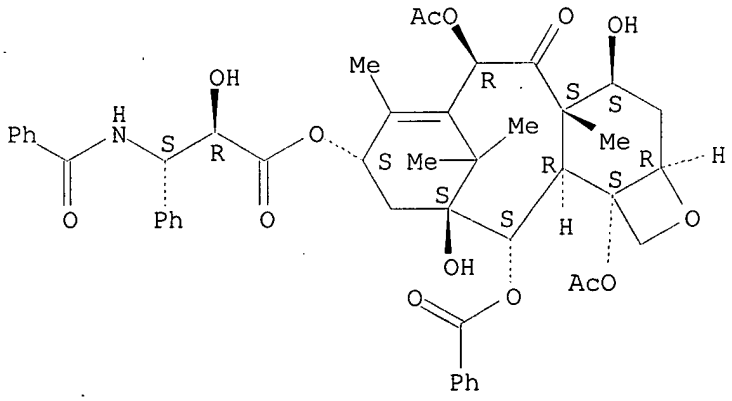
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **2000:756717** HCAPLUS
DN **133:305589**
TI Platinum **complexes** for the treatment of **cancer** and AIDS
IN Shaw, Jiajiu
PA Unitech Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
IC C07F015-00; A61K031-28
CC 1-6 (Pharmacology)
Section cross-reference(s): 63, 78
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000063219	A1	20001026	WO 2000-US10881	20000420 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6458832 B1 20021001 US 2000-552167 20000418 <--
US 2002165204 A1 20021107 US 2002-133117 20020425 <--
PRAI US 1999-130530P P 19990421 <--
US 2000-552167 A3 20000418
OS MARPAT 133:305589
AB The synthesis and use of a series of platinum **complexes** for the treatment of **cancer** and AIDS are disclosed. The platinum **complexes** include cisplatin analogs, carboplatin analogs, and cisplatin and folic acid compds.
ST platinum **complex** prepn **cancer** AIDS treatment; cisplatin analog **cancer** AIDS treatment; carboplatin analog **cancer** AIDS treatment; folate cisplatin compd **cancer** AIDS treatment
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Ad E1B; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(BRCAI; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bad gene Harakiri; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bak; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bax; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bid; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bik; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Bim; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(C-CAM; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(ICE-CED3 protease; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(MMAC1; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(RB1; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(TP53; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Phosphatidylserines
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(and phosphatidylserine carboxylates, platinum **complexes**; platinum **complexes** for treatment of **cancer** and AIDS)

IT Drug delivery systems
(capsules; platinum **complexes** for treatment of **cancer** and AIDS)

IT **Antitumor** agents
(colon **carcinoma**; platinum **complexes** for treatment of **cancer** and AIDS)

IT Intestine, **neoplasm**
Intestine, **neoplasm**
(colon, **carcinoma**, inhibitors; platinum **complexes** for treatment of **cancer** and AIDS)

IT Intestine, **neoplasm**
Intestine, **neoplasm**
(colon, inhibitors; platinum **complexes** for treatment of **cancer** and AIDS)

IT **Antitumor** agents
(colon; platinum **complexes** for treatment of **cancer** and AIDS)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(cytokine; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT DNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(damage, DNA damaging agents; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Adeno-associated virus
Adenoviridae
Herpesviridae
Vaccinia virus
(expression construct; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT DNA

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(genomic; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Liver, **neoplasm**
Liver, **neoplasm**
(**hepatoma**, inhibitors; platinum **complexes** for treatment of **cancer** and AIDS)

IT **Antitumor** agents
(**hepatoma**; platinum **complexes** for treatment of **cancer** and AIDS)

IT Lung, **neoplasm**
Lung, **neoplasm**
Skin, **neoplasm**
Skin, **neoplasm**
(inhibitors; platinum **complexes** for treatment of **cancer** and AIDS)

IT Drug delivery systems
(injections, i.v.; platinum **complexes** for treatment of **cancer** and AIDS)

IT Drug delivery systems
(injections, s.c.; platinum **complexes** for treatment of **cancer** and AIDS)

IT Drug delivery systems
(injections; platinum **complexes** for treatment of **cancer** and AIDS)

IT Gamma ray
(irradn.; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT **Antitumor** agents
Antitumor agents
(lung; platinum **complexes** for treatment of **cancer** and AIDS)

IT **Antitumor** agents
(mammary gland; platinum **complexes** for treatment of **cancer** and AIDS)

IT Mammary gland
Mammary gland
Prostate gland
Prostate gland
(**neoplasm**, inhibitors; platinum **complexes** for treatment of **cancer** and AIDS)

IT Drug delivery systems
(oral; platinum **complexes** for treatment of **cancer** and AIDS)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p16; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p21; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(p73; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT Drug delivery systems
(parenterals; platinum **complexes** for treatment of

cancer and AIDS)
IT Anti-AIDS agents
Antitumor agents
Drug delivery systems
(platinum **complexes** for treatment of **cancer** and AIDS)
IT **Chemotherapy**
Gene therapy
Microwave
Radiotherapy
UV radiation
(platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Nucleic acids
Promoter (genetic element)
cDNA
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Amino acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum **complexes**; platinum **complexes** for treatment of **cancer** and AIDS)
IT **Antitumor** agents
(prostate gland; platinum **complexes** for treatment of **cancer** and AIDS)
IT **Antitumor** agents
Antitumor agents
(skin; platinum **complexes** for treatment of **cancer** and AIDS)
IT **Antitumor** agents
(squamous cell **carcinoma**; platinum **complexes** for treatment of **cancer** and AIDS)
IT Surgery
(**tumor** resection; platinum **complexes** for treatment of **cancer** and AIDS)
IT Radiotherapy
(x-ray; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Gene
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(zak1; platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)
IT Amino acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-, platinum **complexes**; platinum **complexes** for treatment of **cancer** and AIDS)
IT 296763-29-6P 296763-30-9P 302548-95-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(platinum **complexes** for treatment of **cancer** and AIDS)
IT 7440-06-4D, Platinum, **complexes**, biological studies
15663-27-1, Cisplatin 41575-94-4, Carboplatin 74868-20-5 302547-77-9
302549-67-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum **complexes** for treatment of **cancer** and AIDS)

IT 50-18-0, Cyclophosphamide 50-76-0, Dactinomycin 51-21-8, 5-Fluorouracil 51-75-2, Mechlorethamine 52-53-9, Verapamil 55-98-1, Busulfan 57-22-7, Vincristin 59-05-2, Methotrexate 148-82-3, Melphalan 305-03-3, Chlorambucil 518-28-5, Podophyllotoxin 671-16-9, Procarbazine 865-21-4, Vinblastin 1404-00-8, Mitomycin 3778-73-2, Ifosfamide 7689-03-4, Camptothecin 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 13010-20-3, Nitrosurea 14913-33-8, Transplatin 18378-89-7, Plicamycin 20830-81-3, Daunorubicin 23214-92-8, Doxorubicin **30516-87-1, AZT 33069-62-4, Taxol** 33419-42-0, Etoposide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

IT 60-18-4, L-Tyrosine, reactions 112-24-3 10025-99-7, Potassium tetrachloroplatinum (II) 25148-93-0, N,N'-Bis(2-dimethylaminoethyl)oxamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; platinum **complexes** for treatment of **cancer** and AIDS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

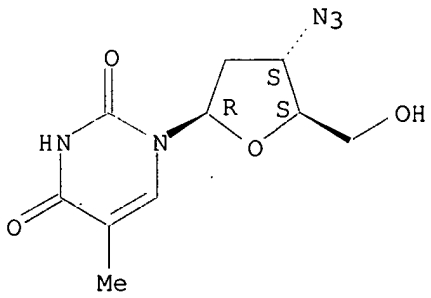
RE

(1) Hydes; US 4228090 A 1980 HCAPLUS
(2) McClay; US 5844001 A 1998 HCAPLUS
(3) Miller; Inorganica Chimica Acta 1999, V290(2), P237 HCAPLUS
(4) Shaw; US 5922689 A 1999 HCAPLUS

IT **30516-87-1, AZT 33069-62-4, Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(platinum **complexes** for treatment of **cancer** and AIDS, and use with other agents)

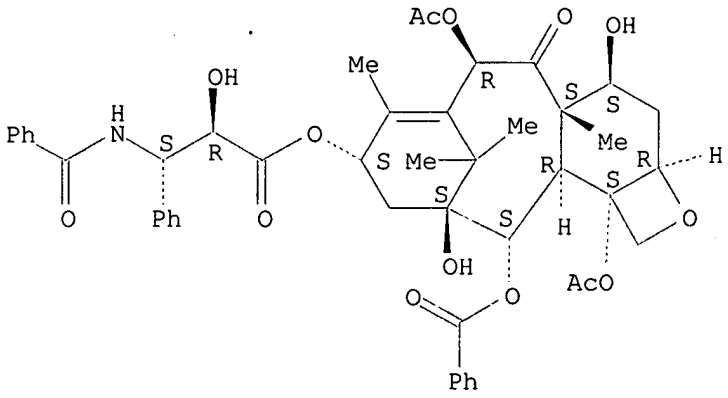
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:535357 HCAPLUS
DN **133:144904**
TI Caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compounds so identified, and pharmaceutical **compositions**
IN Weber, Eckard; Tseng, Ben Y.; Drewe, John; Cai, Sui Xiong
PA Cytovia, Inc., USA
SO PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM G01N033-48
ICS C12Q001-00
CC 1-6 (Pharmacology)
Section cross-reference(s): 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000045165	A1	20000803	WO 2000-US2329	20000201 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1151295	A1	20011107	EP 2000-907081	20000201 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	US 1999-118102P	P	19990201 <--		
	US 1999-454595	A	19991207 <--		
	WO 2000-US2329	W	20000201		

AB A method for identifying potentially therapeutically effective **antineoplastic** compds. **comprises** detg. the ability of test compds. to act as activators of the caspase cascade in viable cultured eukaryotic cells having an intact cell membrane and expressing a **cancer** phenotype, wherein a test compd. that **enhances** caspase cascade activity is detd. to have potential therapeutic efficacy. The method specifically differentiates activators of the caspase cascade from non-specific cell poisons. A therapeutic method useful to modulate in vivo apoptosis or in vivo **neoplastic** disease, **comprising** administering to a subject an effective amt. of a

compd. identified as a caspase cascade activator, is provided. Compds., pharmaceutical **compns**. and a kit for performing the therapeutic method are further provided.

ST **antitumor** agent screening caspase cascade

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(BRCA1; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Brca 2; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Animal cell line
(HL-60; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
Antitumor agents
(Hodgkin's disease inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(Kaposi's **sarcoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Animal cell line
(PC-3; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Animal cell line
(T47D; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(Wilms' **tumor**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Kidney, **neoplasm**
Kidney, **neoplasm**
(Wilms', inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Animal cell line
(ZR-75-1; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(acute lymphocytic **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Nervous system
(ataxia telangiectasia, ataxia telangiectasia mutated cells; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Proteins, specific or class
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcl-2; caspase cascade-based methods for identifying therapeutically

effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(bcr-c-abl; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(bladder **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
Antitumor agents
(brain; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Carcinoid**
(**carcinoid carcinoma** inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Adrenal cortex, **neoplasm**
Bladder
Bladder
Esophagus
Esophagus
Head
Head
Lung, **neoplasm**
Lung, **neoplasm**
Mammary gland
Mammary gland
Neck, anatomical
Neck, anatomical
Ovary, **neoplasm**
Ovary, **neoplasm**
Pancreas, **neoplasm**
Pancreas, **neoplasm**
Prostate gland
Prostate gland
Stomach, **neoplasm**
Stomach, **neoplasm**
Testis, **neoplasm**
Testis, **neoplasm**
Thyroid gland, **neoplasm**
Thyroid gland, **neoplasm**
(**carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(**carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Animal tissue culture
Antitumor agents
Apoptosis
Chemiluminescent substances
Color formers
Drug delivery systems
Drug screening
Fluorescent substances
Mutation

Permeation **enhancers**
Polycythemia vera
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Natural products
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT p53 (protein)
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Multidrug resistance
(cells; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(cervix **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Uterus, **neoplasm**
Uterus, **neoplasm**
(cervix, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Chorion
Chorion
(**choriocarcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(**choriocarcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(chronic lymphocytic **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(chronic myelocytic **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(colon **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Intestine, **neoplasm**
Intestine, **neoplasm**
(colon, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT **Antitumor** agents
(endometrium **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns.**)

IT Uterus, **neoplasm**
Uterus, **neoplasm**

(endometrium, **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(esophagus **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Mycosis
Mycosis
(fungoides, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
Antitumor agents
(genitourinary tract **tumor** inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(hairy cell **leukemia**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(head **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Brain, **neoplasm**
Brain, **neoplasm**
Hodgkin's disease
Hodgkin's disease
Skin, **neoplasm**
Skin, **neoplasm**
(inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Pancreatic islet of Langerhans
Pancreatic islet of Langerhans
(**insulinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(**insulinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(lung **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(lung small-cell **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(mammary gland **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(mammary gland; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(**melanoma**; caspase cascade-based methods for identifying

therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT DNA repair
(mismatch, DNA mismatch repair-deficient cells; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(multiple myeloma; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Mycosis
Skin, **neoplasm**
Skin, **neoplasm**
(mycosis fungoides, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(mycosis fungoides; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(myelogenous **leukemia**, acute; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(neck **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Mammary gland
Mammary gland
Prostate gland
Prostate gland
(**neoplasm**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Nerve, **neoplasm**
Nerve, **neoplasm**
(**neuroblastoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(**neuroblastoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(non-Hodgkin's lymphoma; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Bone, **neoplasm**
(**osteosarcoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(ovary **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Cyclin dependent kinase inhibitors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(p16INK4; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(pancreas **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT Macroglobulins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(primary macroglobulinemia; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT Drug delivery systems
(prodrugs; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(prostate **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(prostate gland; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT Kidney, **neoplasm**
Kidney, **neoplasm**
(renal cell **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(renal cell **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(**rhabdomyosarcoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(**sarcoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
Antitumor agents
(skin; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT Lung, **neoplasm**
Lung, **neoplasm**
(small-cell **carcinoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(soft tissue **sarcoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT Animal tissue
Animal tissue
(soft, **sarcoma**, inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)
IT **Antitumor** agents
(stomach **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents,

compds. so identified, and pharmaceutical **compns**.)

IT Drug interactions
(**synergistic**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(testis **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Platelet (blood)
(thrombocytosis, essential; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT **Antitumor** agents
(thyroid gland **carcinoma**; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT Urogenital tract
Urogenital tract
(**tumor** inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 50-32-8, Benzo[a]pyrene, biological studies 50-44-2, Mercaptopurine 50-76-0, Actinomycin D 51-21-8, 5-Fluorouracil 51-28-5, 2,4-Dinitrophenol, biological studies 51-75-2, Mechlorethamine 53-79-2, Puromycin 54-05-7, Chloroquine 54-31-9 54-62-6, Aminopterin 54-64-8, Thimerosal 54-92-2, Iproniazid 55-98-1, Busulfan 56-12-2, .gamma.-Aminobutyric acid, biological studies 56-25-7, Cantharidin 56-49-5, 3-Methylcholanthrene 56-75-7, Chloramphenicol 57-24-9, Strychnine 57-62-5 58-00-4, Apomorphine 59-05-2, Methotrexate 60-38-8, Strophanthidin acetate 62-74-8, Sodium fluoroacetate 64-77-7, Tolbutamide 64-86-8, Colchicine 66-27-3, Methylmethane sulfonate 66-28-4, Strophanthidin 66-76-2, Dicoumarol 66-81-9, Cycloheximide 71-63-6, Digitoxin 73-31-4, Melatonin 76-28-8, Sarmentogenin 81-23-2, Dehydrocholic acid 82-10-0D, derivs. 83-79-4, Rotenone 83-89-6, Quinacrine 84-17-3, Dienestrol 84-65-1, Anthraquinone 90-65-3, Penicillic acid 97-44-9, Acetarsol 97-77-8, Disulfiram 100-33-4, Pentamidine 115-02-6, Azaserine 121-19-7, Roxarsone 121-54-0, Benzethonium chloride 123-03-5, Cetylpyridinium chloride 126-07-8, Griseofulvin 127-07-1, Hydroxyurea 129-20-4, Oxyphenbutazone 136-77-6, Hexylresorcinol 143-67-9, Vinblastine sulfate 147-94-4, Cytarabine 148-82-3, Melphalan 152-11-4, Verapamil hydrochloride 154-42-7, Thioguanine 302-27-2, Aconitine 305-03-3, Chlorambucil 306-37-6 314-03-4, Pimethixene 316-42-7, Emetine hydrochloride 320-67-2, 5-Azacytidine 446-86-6, Azathioprine 474-07-7 476-32-4, Chelidonine 481-39-0, Juglone 482-53-1, Osajin 483-18-1, Emetine 484-29-7, Dictamine 498-95-3, Nipecotic acid 508-64-5D, Strophanthidinic acid, derivs. 508-77-0, Cymarin 514-42-1 518-28-5, Podophyllotoxin 518-28-5D, Podophyllotoxin, derivs. 518-75-2, Citrinin 543-90-8, Cadmium acetate 548-19-6, Isoginkgetin 548-62-9, Gentian violet 564-25-0, Doxycycline 572-03-2, Pomiferin 595-05-1, Calycanthine 630-56-8, Hydroxyprogesterone caproate 630-60-4, Ouabain 865-21-4, Vinblastine 979-32-8, Estradiol valerate 1134-47-0, Baclofen 1254-85-9, Cedrelone 1397-89-3, Amphotericin B 1397-94-0, Antimycin a 1400-61-9, Nystatin 1404-88-2, Tyrothricin 1405-20-5, Polymyxin B sulfate 1405-87-4, Bacitracin 1405-97-6, Gramicidin 1449-05-4, 18.alpha.-Glycyrrhetic acid 1915-67-9D, Mexicanolide, derivs. 1951-25-3, Amiodarone 2524-37-0 2582-86-7, Atrovenetin 2631-92-7 2752-65-0, Gambogic acid 2752-65-0D, Gambogic acid, derivs. 2753-30-2D, Gedunin, derivs. 3094-09-5, 5-Fluoro-5'-deoxyuridine 3902-71-4, Trioxsalen 4342-03-4, Dacarbazine 4360-12-7, Ajmaline 5490-46-0, Lonchocarpic acid diacetate 5914-82-9 5996-03-2

6385-58-6, Bithionolate sodium 7299-11-8, Psoromic acid 7689-03-4, Camptothecin 10410-83-0, Anthothecol 12244-57-4 12542-36-8, Gossypol-acetic acid 14923-17-2, Arcaine sulfate 15663-27-1, Cisplatin 16561-29-8, Phorbol myristate acetate 17046-60-5 17560-51-9, Metolazone 17617-45-7, Picrotoxinin 17754-44-8, Atractyloside 18000-24-3, 7-Chlorokynurenic acid 18883-66-4, Streptozocin 20004-62-0D, Resistomycin, derivs. 20315-68-8 20830-75-5, Digoxin 21105-15-7, Obtusaquinone 22144-77-0, Cytochalasin d 23214-92-8, Doxorubicin 23590-85-4 24280-93-1, Mycophenolic acid 26213-95-6 26927-01-5 28028-68-4, Crassin acetate 28789-35-7 28860-95-9, Carbidopa **30516-87-1**, **Zidovudine** 30850-52-3, Decahydrogambogic acid 32476-67-8, Periplocymarin **33069-62-4**, **Taxol** 33419-42-0, Etoposide 34157-83-0, Celastrol 41575-94-4, Carboplatin 42193-38-4 49842-07-1, Tobramycin sulfate 53179-09-2, Sisomicin sulfate 53179-11-6, Loperamide 62996-74-1, Staurosporine 64964-48-3, Sericetin diacetate 65059-09-8 66451-22-7, Chukrasin 69505-55-1 70904-56-2D, Kyotorphin, derivs. 70904-57-3D, derivs. 85967-06-2D, Rhodomyrtoxin, derivs. 141543-62-6 161804-20-2, Benzamil hydrochloride 286935-58-8 286935-60-2 287103-76-8 287103-77-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT 186322-81-6, Caspase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT 25535-16-4, Propidium iodide
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT 7440-70-2, Calcium, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**malignant** hypercalcemia inhibitors; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

IT 211918-90-0 220846-54-8 287376-78-7 287376-79-8 287376-80-1 287376-81-2 287376-82-3 287376-83-4 287376-84-5
RL: PRP (Properties)
(unclaimed sequence; caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and pharmaceutical **compns**.)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

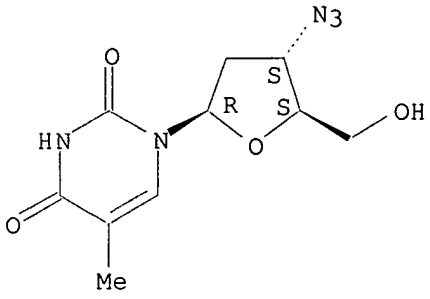
RE

(1) Fulda; Cancer Research 1997, V57, P4656
(2) Mohr; Proc Natl Acad Sci USA 1998, V95, P5045 HCAPLUS
(3) Qi; Oncogene 1997, V15, P1207 HCAPLUS

IT **30516-87-1**, **Zidovudine** **33069-62-4**, **Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(caspase cascade-based methods for identifying therapeutically effective **antineoplastic** agents, compds. so identified, and

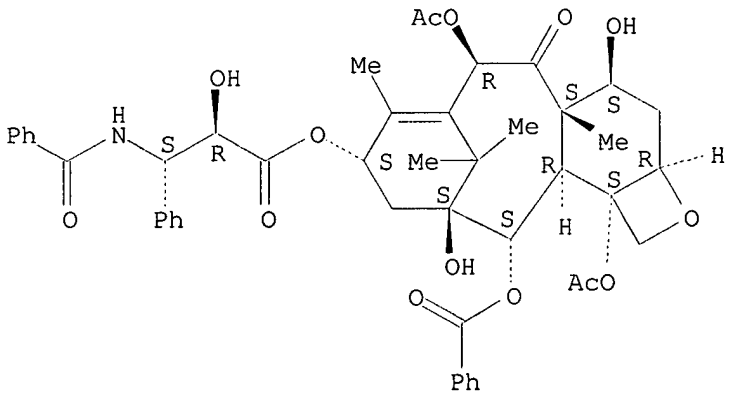
pharmaceutical **compns**.)
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 2000:438177 HCAPLUS
DN 133:305333
TI Cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by the loss of **telomeric** DNA repeats
AU Multani, Asha S.; Chandra, Joya; McConkey, David J.; Sen, Subrata; Cabral, Fernando; Pathak, Sen
CS Departments of Cancer Biology, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 77030, USA
SO Oncology Research (**1999**), 11(10), 455-460
CODEN: ONREE8; ISSN: 0965-0407
PB Cognizant Communication Corp.
DT Journal
LA English
CC **1-6** (Pharmacology)
Section cross-reference(s): 13, 14
AB We have reported earlier that cell death in a metastatic murine melanoma cell line induced by **paclitaxel** and its water-sol. conjugates is

mediated through the extensive erosion of **telomeric** repeats. The purpose of this study was to investigate if loss of **telomeric** repeats was also involved in cell death of Tax-18 and Tax-2-4, two **paclitaxel**-requiring mutant Chinese hamster ovary (CHO) cell lines. Tax-18 and Tax-2-4 cells were grown in **paclitaxel**-free culture medium for 24, 48, 72, and 96 h at 37.degree.C and then harvested for cytol. prepns. Control cultures of both cell lines were grown in **paclitaxel**-supplemented medium and harvested simultaneously. We found that the frequency of **telomeric** assocns. in metaphase prepns. was increased with the duration of **paclitaxel**-depleted culture; Tax-18 cells showed a higher incidence (33.0%) of endoreduplicated metaphases at 24 h of **paclitaxel**-depleted culture than did Tax-2-4 cells, in which endoreduplicated metaphases were rare; the frequency of polyploid cells was increased after 48, 72, and 96 h of **paclitaxel**-depleted culture for Tax-18 relative to that for Tax-2-4 cells; both cell lines showed redns. in **telomeric** signals at chromosomal termini, but not in the interphase nuclei; and both cell lines had shorter terminal **telomeric** restriction fragments after culture in **paclitaxel**-depleted medium. These results support our earlier observations and indicate that redn. of **telomeric** repeats is involved in G2/M cell arrest (endoreduplication) followed by severe DNA fragmentation, and then cell death of two CHO mutant cell lines that require **paclitaxel** for cell division.

ST cell death **paclitaxel telomere** DNA repeat

IT Interphase (cell cycle)
(G2-phase; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

IT Cell death
Telomeres (chromosome)
(cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

IT Mitosis
(metaphase; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

IT Repetitive DNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**telomeric**; cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

IT **33069-62-4, Paclitaxel**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

IT **120178-12-3, Telomerase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)

RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Bacchetti, S; Int J Oncol 1995, V7, P31
(3) Blackburn, E; Telomeres and telomerase, Ciba Foundation Symposium Series 1997, V211, P2 HCAPLUS
(4) Cabral, F; J Cell Biol 1983, V97, P22 HCAPLUS
(5) Fossel, M; JAMA 1998, V279, P1732 MEDLINE
(6) Harley, C; Nature 1990, V345, P458 HCAPLUS
(7) Ishibashi, T; Proc Natl Acad Sci USA 1998, V95, P4219 HCAPLUS

(8) Kipling, D; The telomere 1995
(9) Lee, C; Cytogenet Cell Genet 1993, V63, P156 HCAPLUS
(10) Meyne, J; Proc Natl Acad Sci USA 1989, V89, P7049
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(21) Pathak, S; J Reprod Med 1976, V17, P25 MEDLINE
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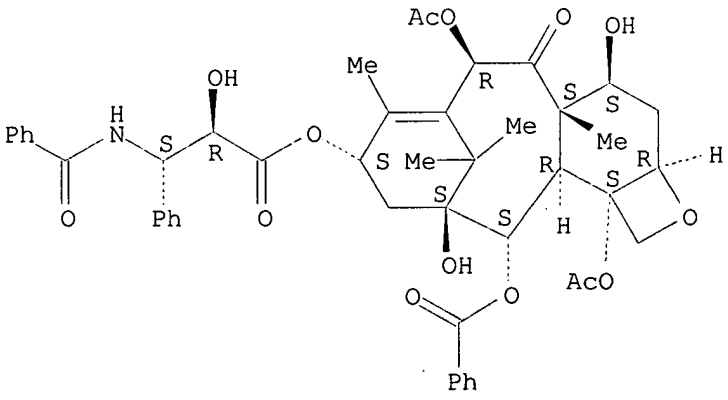
IT **33069-62-4, Paclitaxel**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT **120178-12-3, Telomerase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cell death in **paclitaxel**-dependent Chinese hamster ovary cells is initiated by loss of **telomeric** DNA repeats)
RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L65 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **2000:98300** HCAPLUS
DN **132:132356**

TI Chemically induced intracellular hyperthermia for therapeutic and diagnostic use
IN Bachynsky, Nicholas; Roy, Woodie
PA Texas Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-06
CC 1-12 (Pharmacology)
Section cross-reference(s): 9, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2000006143	A1	20000210	WO 1999-US16940	19990727	<--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	CA 2337690	AA	20000210	CA 1999-2337690	19990727	<--
	AU 9951318	A1	20000221	AU 1999-51318	19990727	<--
	AU 750313	B2	20020718			
	EP 1098641	A1	20010516	EP 1999-935949	19990727	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
PRAI	US 1998-94286P	P	19980727	<--		
	WO 1999-US16940	W	19990727	<--		

AB Therapeutic pharmacol. agents and methods are disclosed for chem. induction of intracellular hyperthermia and/or free radicals for the diagnosis and treatment of infections, **malignancy**, and other medical conditions. A process and **compn.** are provided for the diagnosis or killing of **cancer** cells and inactivation of susceptible bacterial, parasitic, fungal, and viral pathogens by chem. generating heat, and/or free radicals and/or hyperthermia-inducible immunogenic determinants by using mitochondrial uncoupling agents, esp. 2,4-dinitrophenol, and their **conjugates**, either alone or in **combination** with other drugs, hormones, cytokines and radiation.
ST intracellular hyperthermia mitochondria uncoupler diagnosis therapy; dinitrophenol intracellular hyperthermia diagnosis therapy; **cancer** infection diagnosis therapy intracellular hyperthermia; **antitumor** antiinfective intracellular hyperthermia mitochondria uncoupler
IT Hepatitis
(C; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Imaging
(IR; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Lichen
(acids; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT **Antitumor** agents
(**adenocarcinoma**; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Cell cycle
(agents specific for; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Antibiotics
(aminoglycoside; chem. induced intracellular hyperthermia for

diagnostic and therapeutic use, and use with other agents)
IT Artery
(angioplasty; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Peptides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotic; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Macrolides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibiotics; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiviral; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Infection
(bacterial; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Mammary gland
(**carcinoma**; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Alkylating agents, biological
Anti-infective agents
Anti-ischemic agents
Antibacterial agents
Antitumor agents
Antiviral agents
Combinatorial chemistry
Combinatorial library
Cyanine dyes
Diagnosis
Echinococcus multilocularis
Fungicides
Human immunodeficiency virus
Hyperthermia (therapeutic)
Infection
Lyme disease
Neoplasm
Parasiticides
Positron-emission tomography
Radiotherapy
Surgery
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Cytokines
Histones
Interleukin 1
Interleukin 10
Interleukin 2
Interleukin 4
Leukotrienes
Nucleoside analogs
Oligosaccharides, biological studies
Polyenes
Polyethers, biological studies
Prostaglandins

Sulfonamides
Tetracyclines
Thromboxanes
Thyroid hormones
Tumor necrosis factors
Ubiquinones
Uncoupling protein
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Heat-shock proteins
Radicals, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Alcohols, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fluoro; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Neuroglia
(**glioma**; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Hormones, animal, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hormone agonists; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(humanized, to HER-2/neu; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Liver, disease
(hydatid; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Fungi
Parasite
(infection; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
Ionophores
(ionophorous antibiotic uncouplers; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Drug delivery systems
(liposomes; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
(macrolide; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Metabolism
(metabolic rate; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Mitochondria
(mitochondrial uncoupling agents; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other

agents)
IT neu (receptor)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoclonal humanized antibodies to; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Antibodies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, to HER-2/neu; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monounsatd.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Prostate gland
Prostate gland
(**neoplasm**, inhibitors; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Alkaloids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(podophyllin and plant; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyunsatd.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT **Antitumor** agents
(prostate gland; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Drugs
(sulfa drugs; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Drug interactions
(**synergistic**; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Animal tissue
(target tissue metabolic rate; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Fatty acids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(unsatd.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Infection
(viral; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-2a; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.-2b; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Lactams
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-, antibiotics; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Antibiotics
(.beta.-lactam; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT Interferons
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.gamma.; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 9034-40-6, Luteinizing hormone-releasing factor
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(agonists; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 50-18-0 50-49-7 50-65-7 50-76-0, Actinomycin D 51-21-8 51-28-5, biological studies 51-28-5D, derivs. and **conjugates** 51-48-9, biological studies 51-75-2 52-24-4 53-03-2 53-79-2 54-42-2 55-98-1 56-53-1 56-75-7 56-85-9, L-Glutamine, biological studies 57-22-7 57-62-5 57-63-6 57-92-1, biological studies 58-22-0 58-27-5 59-05-2D, analogs 59-87-0 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)-, biological studies 60-54-8D, derivs. 61-32-5 61-33-6, biological studies 61-68-7 61-73-4 63-74-1 63-74-1D, derivs. 65-49-6 66-79-5 67-20-9 67-45-8 68-35-9 68-81-5 70-00-8 72-14-0 74-81-7, biological studies 76-43-7 79-43-6D, nitrobenzene derivs 79-57-2 87-86-5 91-40-7 92-82-0D, Phenazine, derivs. 97-18-7 100-02-7, biological studies 102-82-9 103-82-2D, Benzeneacetic acid, derivs. 112-80-1, 9-Octadecenoic acid (9Z)-, biological studies 112-86-7 114-07-8, Erythromycin 116-44-9 125-84-8 126-07-8 127-33-3 147-85-3, L-Proline, biological studies 147-94-4 148-79-8 148-82-3 154-21-2 154-42-7 154-93-8 299-11-6 302-79-4, Retinoic acid 305-03-3 320-67-2 370-86-5 389-08-2 439-14-5 443-48-1 459-86-9 463-40-1 479-20-9 484-49-1 506-26-3 506-32-1 518-28-5 519-23-3 520-85-4 521-52-8 527-17-3 529-37-3D, 4(1H)-Quinolinone, derivs. 530-78-9 531-82-8 548-62-9 555-60-2 564-25-0 593-38-4 595-33-5 606-06-4 630-56-8 637-07-0 671-16-9 727-81-1 754-91-6 768-94-5, Tricyclo[3.3.1.13,7]decan-1-amine 804-36-4 865-21-4, Vincaleukoblastine 914-00-1 956-48-9 960-71-4 1041-01-6 1066-17-7, Colistin 1151-51-5 1392-21-8, Leucomycin 1397-89-3, Amphotericin B 1400-61-9, Nystatin 1402-38-6, Actinomycin 1402-82-0, Amphomycin 1403-17-4, Candicidin 1403-66-3, Gentamicin 1404-04-2, Neomycin 1404-88-2, Tyrothricin 1405-87-4,

Bacitracin 1405-97-6, Gramicidin 1406-05-9, Penicillin 1406-11-7, Polymyxin 1689-83-4 1960-88-9 2001-95-8, Valinomycin 2022-85-7 2030-63-9 2034-22-2 2338-10-5 2338-11-6 2338-12-7 2338-29-6 2520-21-0 **3056-17-5** 3511-16-8 3778-73-2 4151-50-2 4342-03-4 4428-95-9 4543-33-3 5331-91-9 5536-17-4 6217-54-5 6236-05-1 6893-02-3 7283-41-2 7440-43-9, Cadmium, biological studies 7440-70-2, Calcium, biological studies 7481-89-2 7562-61-0 8011-61-8, Tyrocidine 8052-16-2, Actinomycin C 9007-92-5, Glucagon, biological studies 10118-90-8 10417-94-4 10461-11-7 10537-47-0 11000-17-2, Vasopressin 11003-38-6, Capreomycin 11006-76-1, Virginiamycin 11006-78-3, Stendomycin 11017-50-8, Suzukacillin 11029-61-1, Gramicidin A 11056-06-7, Bleomycin 11111-23-2, Lividomycin 11115-82-5, Enduracidin 12633-72-6, Amphotericin 12692-85-2, Antiamebin 13010-47-4 13278-36-9 13311-84-7 13392-28-4 13799-49-0 13799-49-0D, isomers 13909-09-6 13925-12-7 14459-29-1 14698-29-4 15663-27-1 16128-96-4 17090-79-8, Monensin 17650-86-1 17924-92-4 18323-44-9 19246-70-9 19562-30-2 19721-56-3 20559-55-1 22494-42-4 22662-39-1 22916-47-8 25104-18-1 25546-65-0 26097-80-3 26655-39-0 26786-84-5 26787-78-0 27061-78-5, Alamethicin 27138-57-4D, lactone, derivs. 27194-24-7D, derivs. 27314-97-2 27693-70-5 28380-24-7, Nigericin 29767-20-2 30042-37-6 **30516-87-1** 31441-78-8, Purinethiol 32986-56-4 **33069-62-4** 33354-58-4 33419-42-0 34368-04-2 36791-04-5 36877-68-6D, derivs. 37231-28-0, Melittin 37517-28-5 38000-06-5 38640-92-5 40451-44-3 41575-94-4 45285-51-6 50892-23-4 51940-44-4 52214-84-3 53024-98-9, Everninomicin 53714-56-0 54965-21-8 55486-00-5 56219-57-9 59277-89-3 60842-45-7, Desaspidin 60976-67-2, Gramicidin J 61477-96-1 62362-59-8 63939-09-3, Curamycin 65277-42-1 65454-19-5, Trichotoxin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 68786-66-3 69655-05-6 72301-79-2 74011-58-8 74722-67-1 80738-43-8D, Lincosamide, derivs. 80802-79-5, Cecropin (antibacterial peptide) 81627-83-0, Colony-stimulating factor 1 82410-32-0 82419-36-1 83150-76-9 83869-56-1, Colony-stimulating factor 2 84625-61-6 85721-33-1 86386-73-4 89107-47-1, Hypelcin 91156-71-7 95233-18-4 100292-37-3, Zervamicin 113041-69-3, Magainin 115717-83-4 121007-17-8 127779-20-8 128470-16-6 134678-17-4 136470-78-5 145781-92-6 148159-85-7, Saturnisporin SA IV 150378-17-9 154598-52-4 155213-67-5 159989-64-7 161814-49-9 171980-70-4, Trichorzin HA V 256932-84-0 256932-84-0D, sulfoxide and sulfone metabolites 256932-85-1 256932-86-2 256932-87-3 256932-88-4 256932-89-5
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 9001-92-7, Proteinase 9039-48-9, Aromatase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

IT 29656-58-4D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lichen acids; chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)

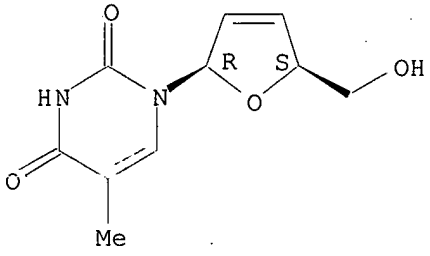
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Gordon; US 4569836 A 1986 HCAPLUS

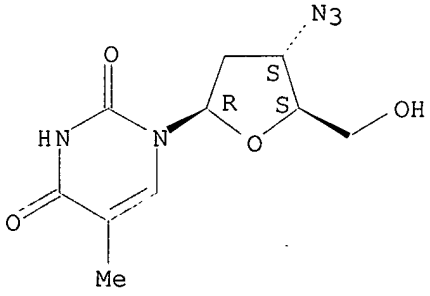
(2) Gordon; US 5622686 A 1997
(3) Rubin; US 5005588 A 1991
IT **3056-17-5 30516-87-1 33069-62-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chem. induced intracellular hyperthermia for diagnostic and therapeutic use, and use with other agents)
RN 3056-17-5 HCAPLUS
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



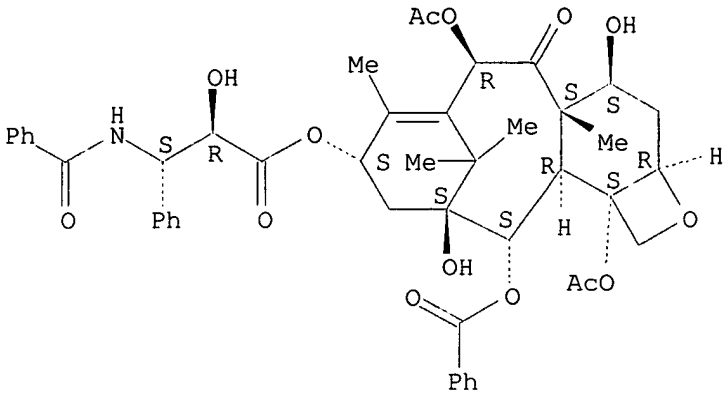
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **1999:659252** HCAPLUS
DN **131:291291**
TI New **combined** preparation for the treatment of **neoplastic** or infectious diseases
IN Bartholeyns, Jacques; Fouron, Yves; Romet-Lemonne, Jean-loup
PA I.D.M. Immuno-Designed Molecules, Fr.
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K035-14
ICS C12N005-08; A61K031-00; A61K035-14; A61K038-19; A61K035-14; A61K039-00
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 15
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9951248	A1	19991014	WO 1999-EP2105	19990329 <--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2321029	AA	19991014	CA 1999-2321029	19990329 <--
	AU 9931479	A1	19991025	AU 1999-31479	19990329 <--
	EP 1067944	A1	20010117	EP 1999-913310	19990329 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002510639	T2	20020409	JP 2000-542019	19990329 <--
PRAI	EP 1998-400783	A	19980402 <--		
	WO 1999-EP2105	W	19990329 <--		

AB The present invention relates to a **combined** prepn. contg. as active substance the following individual components, in the form of a kit-of-parts: monocyte derived cells, particularly cytotoxic macrophages, **chemotherapy** or immunotherapy drugs, for the **simultaneous**, sep. or **sequential** use, for the treatment of **cancer** or infectious diseases.
ST kit **antitumor** immunocyte immunostimulant
IT Immunostimulants

(adjuvants; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Glycosides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(amino; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Blood transfusion
(apheresis; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Blood serum
(autologous; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Medical goods
(blood bags, collection with; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Monocyte
(cells derived from; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Blood
(centrifugation of; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Leukocyte
(collection of peripheral; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Lymphocyte
Mononuclear cell (leukocyte)
(collection of; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Intestine, **neoplasm**
(colorectal; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Antibiotics
Antitumor agents
Antiviral agents
Culture media
Cytotoxic agents
Immunostimulants
Immunotherapy
Melanoma
Mycobacterium BCG
Ovary, **neoplasm**
Test kits
Vaccines
(**combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Cytokines
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(**combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Anthracyclines
Cyclins
Interleukin 12
Interleukin 2
Macrolides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT Preservatives
(cryo-; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Macrophage
(cytotoxic; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Apoptosis
(inducers; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Drug delivery systems
(injections; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Lung, **neoplasm**
(**mesothelioma**; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Glycopeptides
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(muramic acid-contg.; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT **Leukemia**
(myelogenous; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Prostate gland
(**neoplasm**; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Centrifugation
(of blood; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Amines, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(polyamines, nonpolymeric, inhibitors; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT **Proliferation** inhibition
(**proliferation** inhibitors; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Erythrocyte
Platelet (blood)
Polymorphonuclear leukocyte
(removal of; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Vaccines
Vaccines
(**tumor**; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT **Antitumor** agents
Antitumor agents
(vaccines; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Alkaloids, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(vinca; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Lactams
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(.beta.-; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)
IT Interferons

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(.gamma.; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT 124-38-9, Carbon dioxide, biological studies 7782-44-7, Oxygen, biological studies
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
(artificial atm. contg.; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT 50-07-7, Mitomycin C 50-18-0, Cyclophosphamide 51-21-8D, Fluorouracil, derivs. 57-22-7, Vincristine 71-58-9, Prodasone 154-93-8, Carmustine 156-54-7, Sodium butyrate 446-86-6, Azathioprine 1406-05-9, Penicillin 4428-95-9, Foscarnet 7803-58-9, Sulfamide 10540-29-1, Tamoxifen 11111-12-9, Cephalosporins 15663-27-1, Cisplatin 20830-81-3, Daunorubicin 25316-40-9, Adriamycin **30516-87-1**, **Azt** **33069-62-4**, **Taxol** 37205-61-1, Proteinase inhibitor 59277-89-3, Acyclovir 63798-73-2, Cyclosporine 79517-01-4, Sandostatin 83869-56-1, Gmcsf 114977-28-5D, Taxotere, derivs. 143011-72-7, Gcsf
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**combined** prepn. for the treatment of **neoplastic** or infectious diseases)

IT 80449-01-0, Topoisomerase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; **combined** prepn. for the treatment of **neoplastic** or infectious diseases)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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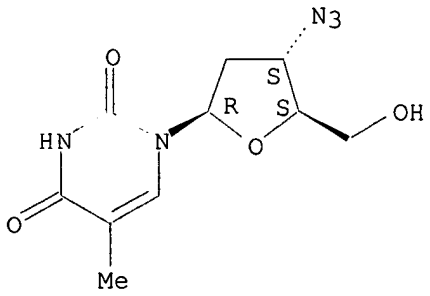
(3) Hennemann, B; JOURNAL OF IMMUNOTHERAPY 1997, V20(5), P365 HCAPLUS
(4) I D M Immuno-Designed Molecules; WO 9622781 A 1996 HCAPLUS

IT **30516-87-1**, **Azt** **33069-62-4**, **Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(**combined** prepn. for the treatment of **neoplastic** or infectious diseases)

RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

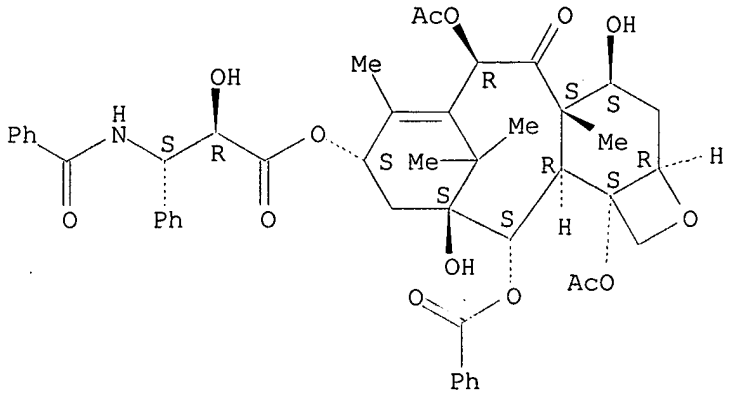
Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-

tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **1999:606769** HCAPLUS
DN **131:341861**
TI Pluronic P85 increases permeability of a broad spectrum of drugs in polarized BBMEC and Caco-2 cell monolayers
AU Batrakova, Elena V.; Li, Shu; Miller, Donald W.; Kabanov, Alexander V.
CS Department of Pharmaceutical Sciences, Nebraska Medical Center, College of Pharmacy, Omaha, NE, 68198-6025, USA
SO Pharmaceutical Research (**1999**), 16(9), 1366-1372
CODEN: PHREEB; ISSN: 0724-8741
PB Kluwer Academic/Plenum Publishers
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
AB Previous studies demonstrated that inhibition of P glycoprotein (P-gp) by Pluronic P85 (P85) block copolymer increases apical (AP) to basolateral (BL) transport of rhodamine 123 (R123) in the polarized monolayers of bovine brain microvessel endothelial cells (BBMEC) and Caco-2 cells. The present work examines the effects of P85 on the transport of fluorescein (Flu), doxorubicin (Dox), etoposide (Et), **taxol** (Tax), 3'-azido-3'-deoxythymidine (**AZT**), valproic acid (VPA) and loperamide (Lo) using BBMEC and Caco-2 monolayers as in vitro models of the blood brain barrier and intestinal epithelium resp. Drug permeability studies were performed on the confluent BBMEC and Caco-2 cell monolayers mounted in Side-Bi-Side diffusion cells. Exposure of the cells to P85 significantly **enhanced** AP to BL permeability coeffs. of Flu, Tax, Dox and **AZT** in both cell models. Further, P85 **enhanced** AP to BL transport of Et, VPA and Lo in Caco-2 monolayers. No changes in the permeability coeffs. of the paracellular marker mannitol were obsd. in the presence of the copolymer. P85 increases AP to BL permeability in BBMEC and Caco-2 monolayers with respect to a broad panel of structurally diverse compds., that were previously shown to be affected by P-gp and/or multidrug resistance assocd. protein (MRP) efflux systems. Broad specificity of the block copolymer effects with respect to drugs and efflux systems appears to be a valuable property in view of developing pharmaceutical formulations to increase drug accumulation in selected organs and overcome both acquired and intrinsic drug resistance that limits the effectiveness of many **chemotherapeutic** agents.
ST drug permeability Pluronic P35; **antitumor** drug permeability

Pluronic P35
IT Animal cell line
(Caco-2; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
IT **Antitumor** agents
Biological transport
Drug delivery systems
Multidrug resistance
(Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
IT P-glycoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
IT Brain
(microvessel endothelial cells; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
IT Biological transport
(permeation; Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
IT 99-66-1, Valproic acid 2321-07-5, Fluorescein 23214-92-8, Doxorubicin **30516-87-1, Azt 33069-62-4, Taxol**
33419-42-0, Etoposide 53179-11-6, Loperamide 106392-12-5, Pluronic P85
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Adkinson, K; Epilepsy Res 1996, V23, P95
(2) Batrakova, E; Br J Cancer 1996, V74, P1545 HCAPLUS
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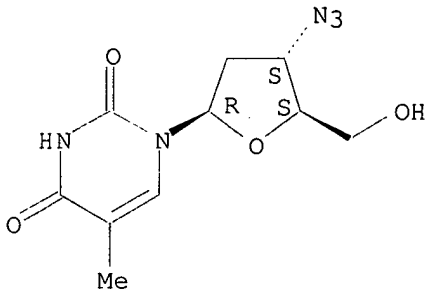
(28) Wang, Y; J Pharm Sci 1997, V86, P1484 HCAPLUS

(29) Wu, D; Brain Res 1998, V791, P313 HCAPLUS
(30) Yu, V; Bioconjugate Chem 1996, V7, P209

IT **30516-87-1, Azt 33069-62-4, Taxol**
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(Pluronic P85 increases permeability of a broad spectrum of drugs in polarized bovine brain microvessel endothelial cells and Caco-2 cell monolayers)

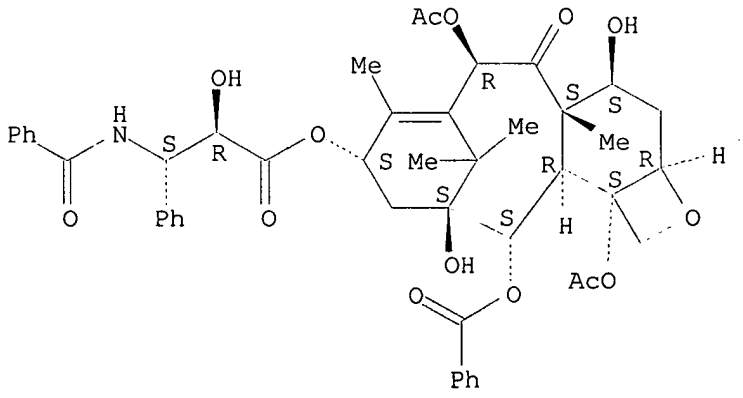
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:578949 HCAPLUS
DN 131:209112
TI A method for evaluating the antitumor effect of a drug or a treatment
IN Ishikawa, Atsuo; Yanaginuma, Yuji; Tsuruoka, Hiroki; Ito, Akira
PA Kayaku K. K., Japan; Pola Chemical Industries, Inc.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C12Q001-527

CC **1-1** (Pharmacology)
Section cross-reference(s): 7
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11243994	A2	19990914	JP 1998-52077	19980304 <--

AB A method is described for evaluating the antitumor effect of a drug or a treatment by measuring a change in **telomere**-related substance activity in cancer cells caused by the drug or treatment. By this method, the antitumor effect of a drug or a treatment, and the characteristics of cancer cells against the drug or treatment, can be evaluated. The method is also useful for predicting the effect of an antitumor agent in cancer chemotherapy. Correlations were obsd. between the growth inhibitory effect on cell lines derived from various types of cancer and the change in **telomerase** activity in these cells caused by the antitumor agent (e.g., cisplatin, **taxol**).

ST antitumor agent cancer chemotherapy **telomerase telomere**

IT Animal cell line
(SiHa; HeLa; SKOV3; method for evaluating antitumor effect of drug or treatment)

IT Uterus, neoplasm
Uterus, neoplasm
(cervix, inhibitors; method for evaluating antitumor effect of drug or treatment)

IT Antitumor agents
(cervix; method for evaluating antitumor effect of drug or treatment)

IT Ovary, neoplasm
Ovary, neoplasm
(inhibitors; method for evaluating antitumor effect of drug or treatment)

IT Antitumor agents
Chemotherapy
Telomeres (chromosome)
(method for evaluating antitumor effect of drug or treatment)

IT Antitumor agents
Antitumor agents
(ovary; method for evaluating antitumor effect of drug or treatment)

IT **120178-12-3**, Nucleotidyltransferase, terminal deoxyribo-(**telomeric** DNA)
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for evaluating antitumor effect of drug or treatment)

IT 15663-27-1, Cisplatin **33069-62-4, Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(method for evaluating antitumor effect of drug or treatment)

IT **120178-12-3**, Nucleotidyltransferase, terminal deoxyribo-(**telomeric** DNA)
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(method for evaluating antitumor effect of drug or treatment)

RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

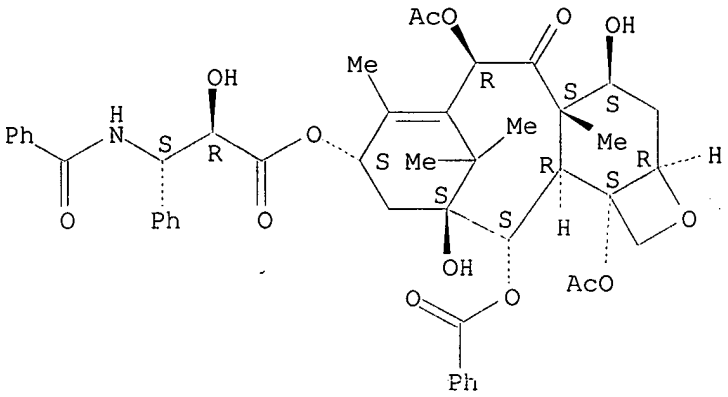
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **33069-62-4, Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(method for evaluating antitumor effect of drug or treatment)

RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-

2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **1999:312077** HCAPLUS
DN **130:346876**
TI Potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**
AU Schwartz, J. D.; Howard, W.; Scadden, D. T.
CS New York Hosp./Cornell Med. Center Hematology/Oncology, New York, NY, 10021, USA
SO AIDS (London) (**1999**), 13(2), 283-284 RC607.A26 A344
CODEN: AIDSET; ISSN: 0269-9370
PB Lippincott Williams & Wilkins
DT Journal
LA English
CC 1-4 (Pharmacology)
AB The interactions between cytochrome P 450 3A(CYP3A)-suppressive anti-HIV regimens and **paclitaxel** resulted in substantial **chemotherapy**-related side effects in patients with AIDS-related Kaposi's **sarcoma**. **Paclitaxel** (100 mg/m2) administration over 3 h every other week to patients with HIV infection and Kaposis **sarcoma** resulted in near-total disappearance of Kaposi's **sarcoma**. The first 12 cycles were complicated only by mild nausea and alopecia; intermittent granulocyte colony-stimulating factor was used to prevent neutropenia. Antiretroviral therapy included several **combinations** of **zidovudine**, zalcitabine, lamivudine, **stavudine**, and indinavir, all of which were unsuccessful in reducing the viral load. Subsequently the patients were started on didanosine, saquinavir and delavirdine. As a result of this therapy, **paclitaxel** resulted in profound mucositis requiring hospitalization and febrile neutropenia with an abs. neutrophil count <100 x106/l. Given the above scenario, it is likely, that coadministration of delavirdine and saquinavir results in a situation where levels of either (or both) drugs are increased and **concomitant** administration of taxane **chemotherapy** with **paclitaxel** leads to side-effects significantly out of proportion to the taxane dose used. Thus, taxane doses in these situations should be reduced and patients carefully monitored.
ST taxane **chemotherapy** adverse interaction antiretroviral therapy AIDS **sarcoma**; **paclitaxel** interaction adverse antiretroviral therapy AIDS **sarcoma**
IT Drug interactions

(adverse; potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

IT AIDS (disease)
Antiviral agents
(potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

IT Taxanes
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

IT **Antitumor** agents
(**sarcoma**; potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

IT 9035-51-2, Cytochrome P450, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(3A antiretroviral therapy interaction with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

IT **3056-17-5, Stavudine** 7481-89-2, Zalcitabine 8064-90-2 **30516-87-1, Zidovudine 33069-62-4, Paclitaxel** 69655-05-6, Didanosine 86386-73-4, Fluconazole 127779-20-8, Saquinavir 134678-17-4, Lamivudine 136817-59-9, Delavirdine 150378-17-9, Indinavir 159989-64-7, Nelfinavir
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Carpenter, C; Ann Intern Med 1998, V128, P1057
(3) Carpenter, C; JAMA 1998, V280, P78 HCAPLUS
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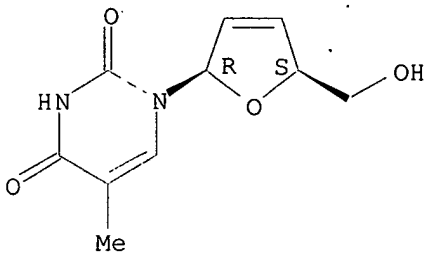
(6) Gill, P; J Acquir Immune Defic Syndr 1997, V14(suppl), PA35
(7) Harris, J; Cancer Res 1994, V15, P4026
(8) Piscitelli, S; Clin Infect Dis 1996, V23, P685 HCAPLUS
(9) von Moltke, L; J Clin Pharmacol 1998, V38, P106 HCAPLUS

IT **3056-17-5, Stavudine 30516-87-1, Zidovudine 33069-62-4, Paclitaxel**
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential interaction of antiretroviral therapy with **paclitaxel** in patients with AIDS-related Kaposi's **sarcoma**)

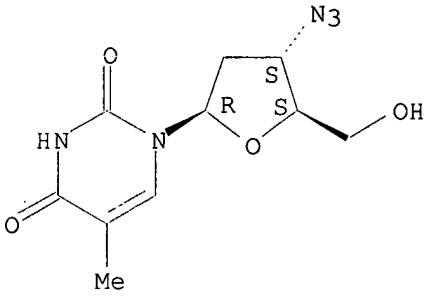
RN 3056-17-5 HCAPLUS
CN Thymidine, 2',3'-didehydro-3'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



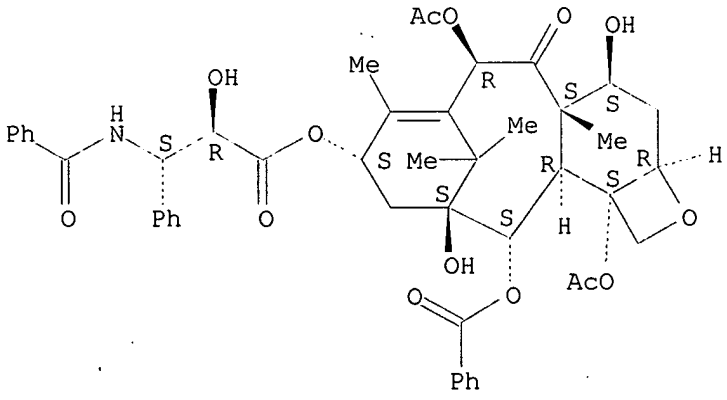
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1999:42002 HCAPLUS
DN 130:276313
TI Cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity
AU Multani, Asha S.; Li, Chun; Ozen, Mustafa; Imam, Ashraf S.; Wallace,

Sidney; Pathak, Sen
CS Department of Cancer Biology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030, USA
SO Oncology Reports (**1999**), 6(1), 39-44
CODEN: OCRPEW; ISSN: 1021-335X
PB Oncology Reports
DT Journal
LA English
CC **1-6** (Pharmacology)
AB The purpose of this study was to investigate and compare the effects of **paclitaxel** and its water-sol. conjugates (sodium-pentetic acid-**paclitaxel**; polyethylene glycol-**paclitaxel**, and poly[L-glutamic acid]-**paclitaxel**) on chromosome morphol. and induction of apoptosis in a metastatic murine melanoma cell line (K1735 clone X-21). For this, murine melanoma cells were treated continuously for 72 h with three concns. (1.2 .mu.M, 2.4 .mu.M, and 4.8 .mu.M) of each of **paclitaxel**, and conjugates. Another set of cells were pulse-treated at 2.4 .mu.M, 4.8 .mu.M and 9.6 .mu.M concns. of each of these drugs for 4 h and the recovered cells were examd. after 72 h. Control cultures received only the solvents (DMSO or water). Our results showed a significant increase in the frequencies of **telomeric** assocns., chromosome aberrations, polyploidization, distorted and disintegrated chromosome morphol., and reduced **telomeric** signal intensity by fluorescence in situ hybridization, in treated cultures as compared to the controls. However, we detected no change in **telomerase** activity. In addn., the majority of interphase nuclei in treated cells showed apoptotic bodies, with chromatin condensation. These in vitro results suggest that cell death induced by **paclitaxel** and its water-sol. conjugates is due to the loss of **telomeric** repeats, as shown by reduced signal fluorescence and increased **telomeric** assocns.
ST melanoma metastasis **paclitaxel telomere telomerase**
IT Chromatin
Chromosome aberrations
Telomeres (chromosome)
(cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)
IT Antitumor agents
Antitumor agents
Antitumor agents
(melanoma, metastasis; cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)
IT **33069-62-4, Paclitaxel 33069-62-4D, Paclitaxel**, conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)
IT **120178-12-3, Telomerase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(3) Crossin, K; Cell 1981, V27, P341 HCAPLUS
(4) Danesi, R; Mol Pharmacol 1995, V47, P1106 HCAPLUS
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(6) Jordan, M; Cancer Res 1996, V56, P816 HCAPLUS
(7) Kim, N; Science 1994, V266, P2011 HCAPLUS
(8) Li, C; Anticancer Drugs 1996, V7, P642 HCAPLUS
(9) Li, C; Cancer Res 1998, V58, P2404 HCAPLUS
(10) Martin, S; Cell Tissue Kinet 1990, V23, P545 MEDLINE
(11) McClintock, B; Genetics 1941, V26, P234
(12) Milas, L; Cancer Chemother Pharmacol 1995, V35, P297 HCAPLUS
(13) Muller, H; Woods Hole 1938, V8, P183
(14) Multani, A; Anticancer Res 1997, V17, P4269 HCAPLUS
(15) Ozen, M; Prostate 1998, V36, P264 HCAPLUS
(16) Pathak, S; Archivos de Zootechnia 1996, V45, P141 HCAPLUS
(17) Pathak, S; Cancer Genet Cytogenet 1991, V56, P209 MEDLINE
(18) Pathak, S; In Vivo 1994, V8, P843 MEDLINE
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(20) Pathak, S; Oncol Rep 1998, V5, P373 HCAPLUS
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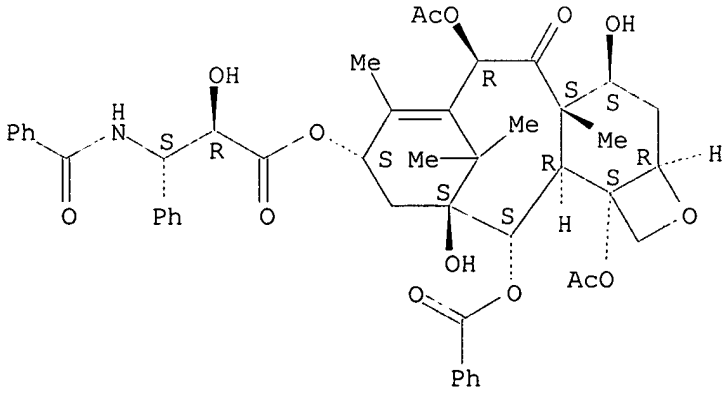
(22) Sollott, S; J Clin Invest 1995, V95, P1869 HCAPLUS
(23) Wani, M; J Am Chem Soc 1971, V93, P2325 HCAPLUS
(24) Wiernik, P; J Clin Oncol 1987, V5, P1232 MEDLINE

IT **33069-62-4, Paclitaxel 33069-62-4D, Paclitaxel**, conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)

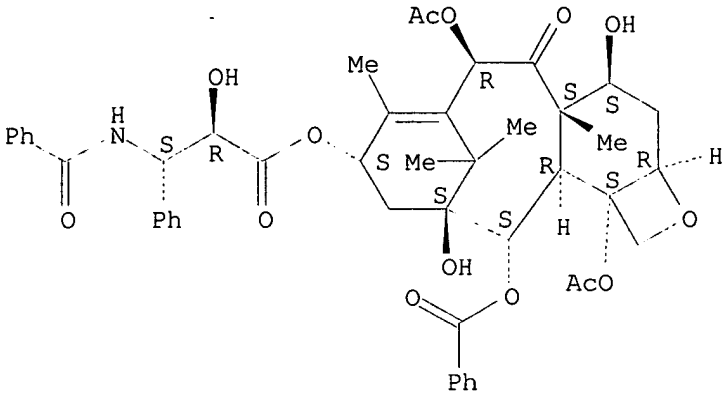
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT **120178-12-3, Telomerase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(cell-killing by **paclitaxel** in a metastatic murine melanoma cell line is mediated by extensive **telomere** erosion with no decrease in **telomerase** activity)
RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L65 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN **1998:764282** HCAPLUS
DN **130:20546**
TI HIV and **cancer** treatment
IN Camden, James Berger
PA The Procter & Gamble Company, USA
SO PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K031-41
ICS A61K031-415; A61K031-66
CC 1-5 (Pharmacology)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9851303	A1	19981119	WO 1997-US21564	19971126 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9709095	A	19980511	ZA 1997-9095	19971010 <--
AU 9874029	A1	19981208	AU 1998-74029	19971126 <--
EP 954309	A1	19991110	EP 1997-949599	19971126 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
BR 9712981	A	20000418	BR 1997-12981	19971126 <--
CN 1254281	A	20000524	CN 1997-182189	19971126 <--
JP 2000510156	T2	20000808	JP 1998-522997	19971126 <--
NO 9901701	A	20000117	NO 1999-1701	19990409 <--

KR 2000049064 A 20000725 KR 1999-703137 19990410 <--
PRAI US 1997-46726P P 19970516 <--
WO 1997-US21564 W 19971126 <--

AB A method of treating HIV or other viral infections by administering a herbicide or fungicide or deriv. thereof to an animal or human. The fungicides or herbicides can be used in conjunction with other treatments, e.g. with **AZT** or protease inhibitors for the treatment of HIV. For example, thiabendazole and chloropropham have been shown to quickly reduce the level of virus prodn. from cell populations chronically infected with HIV-1 and the antiviral effect is maintained with continued compd. exposure. This redn. of virus prodn. occurs at concns. which are non toxic to the host cell and which have no effect on the syntheses of cellular DNA, RNA and protein. Further, chronically infected cells treated for prolonged periods of time with thiabendazole and chloropropham were not super-infected with HIV. A method for inhibiting the growth of **tumors** and **cancers** in mammals **comprising** administering a herbicidal or fungicidal deriv. is also disclosed herein. The fungicides or herbicides can be used in conjunction with other treatments, e.g. **taxol** for the treatment of breast **cancer**. **Potentiators** can also be included in the herbicidal or fungicidal **compn**. This method is particularly effective when the **cancer** or virus is an animal cell genetically modified by plant or fungus genetic material. A **chemotherapeutic** agent can also be administered first to significantly reduce the size of the **cancer** and then the treatment with the herbicide or fungicide is used. These methods are particularly effective when the **cancer** or virus is a mutated cell **comprising** plant or fungal genetic material.

ST herbicide fungicide **antitumor** antiviral HIV

IT Intestine, **neoplasm**
(colon, inhibitors; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT **Antitumor** agents
(colon; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT Lung, **neoplasm**
(inhibitors; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT **Antitumor** agents
(**leukemia**; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT Drug delivery systems
(liposomes; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT **Antitumor** agents
(lung; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT **Antitumor** agents
(mammary gland; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

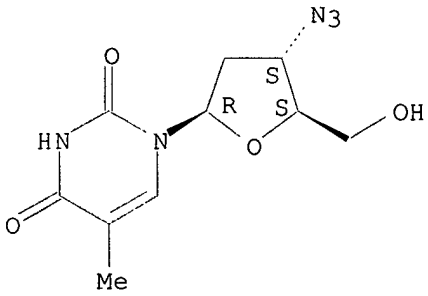
IT **Antitumor** agents
(**melanoma**; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT Mammary gland
(**neoplasm**, inhibitors; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)

IT **Antitumor** agents
Antiviral agents
Fungicides
Herbicides
Human immunodeficiency virus 1
(therapy of **cancer** and viral infections with drugs in

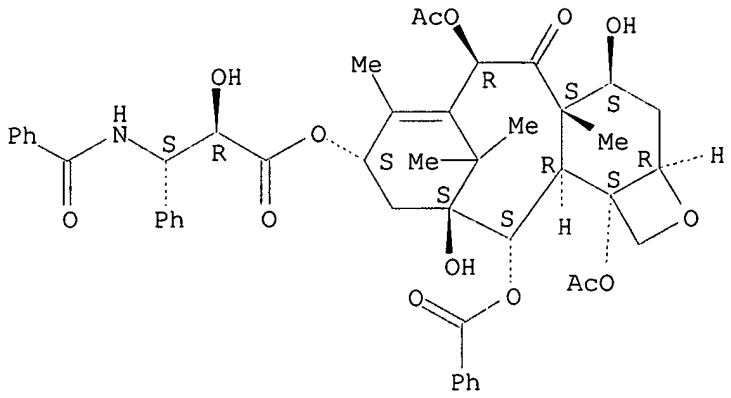
combination with fungicides and herbicides)
IT 144114-21-6, Retropepsin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitors; therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)
IT 50-18-0, Cyclophosphamide 50-44-2, 6-Mercaptopurine 50-76-0, Dactinomycin 50-91-9 51-17-2, Benzimidazole 51-21-8, Fluorouracil 59-05-2, Methotrexate 101-21-3, Chloropropham 126-07-8, Griseofulvin 127-07-1, Hydroxyurea 147-94-4, Cytarabine 148-79-8 154-42-7, 6-Thioguanine 320-67-2, Azacytidine 645-05-6, Altretamine 768-94-5, Amantadine 1071-83-6 9015-68-3, Asparaginase 10605-21-7 11056-06-7, Bleomycin 15663-27-1, Cisplatin 17804-35-2, Benomyl 18378-89-7, Plicamycin 21679-14-1, Fludarabine 23214-92-8, Doxorubicin 25316-40-9, Adriamycin 29767-20-2, Teniposide **30516-87-1**, 3'-Azido-3'-deoxythymidine **33069-62-4**, **Taxol** 33419-42-0, Etoposide 34435-09-1, A-36683 53910-25-1, Pentostatin 60207-90-1, Propiconazole 76849-19-9, CB3717 86386-73-4, Fluconazole 125317-39-7, Navelbine 216252-30-1, Cyctrabine
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Merck & Co; EP 0617968 A 1994 HCAPLUS
(2) Procter & Gamble; WO 9632103 A 1996 HCAPLUS
(3) Procter & Gamble; WO 9632104 A 1996 HCAPLUS
(4) Procter & Gamble; WO 9632115 A 1996 HCAPLUS
(5) Procter & Gamble; WO 9705873 A 1997 HCAPLUS
IT **30516-87-1**, 3'-Azido-3'-deoxythymidine **33069-62-4**, **Taxol**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapy of **cancer** and viral infections with drugs in **combination** with fungicides and herbicides)
RN 30516-87-1 HCAPLUS
CN Thymidine, 3'-azido-3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:729760 HCAPLUS
DN 130:137432
TI Molecular and biological features of two new human squamous and adenocarcinoma of the lung cell lines
AU Gasperi-Campani, Anna; Roncuzzi, Laura; Ricotti, Luca; Lenzi, Laura; Gruppioni, Rita; Sensi, Alberto; Zini, Nicoletta; Zoli, Wainer; Amadori, Dino
CS Department of Experimental Pathology, University of Bologna, Bologna, 40126, Italy
SO Cancer Genetics and Cytogenetics (**1998**), 107(1), 11-20
CODEN: CGCYDF; ISSN: 0165-4608
PB Elsevier Science Inc.
DT Journal
LA English
CC 14-1 (Mammalian Pathological Biochemistry)
Section cross-reference(s): **1**, 3
AB Two human cancer cell lines were established from metastatic lesions of an adenocarcinoma (RAL) and a squamous cell (CAEP) carcinoma of the lung. The clin. histories of the patients from whom the cell lines were derived are reported. The lines were maintained in continuous culture with doubling times of 65 (RAL) and 50 (CAEP) hours. The RAL and CAEP cell lines, whose morphol. and ultrastructural features are presented, showed extensively rearranged karyotypes with modal no. of 85 (RAL) and 98 (CAEP). In particular, chromosome 2 pentasomy and several clonal markers were evident in the RAL cells, whereas a **telomeric** deletion of chromosome 1, del(1)(q32), was obsd. in the CAEP cells. The morphol. data were confirmed by high expression of specific antigens for each histotype. A marked positivity of the neuron-specific enolase (NSE) levels was evident by immunoenzymic assays in the cell lines cytosol with respect to those present in the resp. patient's sera. No amplification or rearrangements were evident in the CMYC, LMYC, NMYC, INT-2, ERBB2, HRAS, KRAS, MOS, HST-1 genes by Southern blotting anal. in each cell line. Point mutations in exon 1 of KRAS and in exon 7 of TP53 were evident by polymerase chain reaction (PCR)-DNA sequencing in the RAL cell line, whereas no alterations were present in the HRAS and RB genes. The four genes studied did not show point mutations in the CAEP cell line. The RAL cell line was resistant to all the drugs tested, whereas the CAEP cells were sensitive to vinblastine. These cell lines may represent useful exptl. models to investigate lung cancer biol. and anticancer drug response.
ST chromosome aberration lung squamous cell carcinoma adenocarcinoma line; tumor antigen lung squamous cell carcinoma adenocarcinoma line; drug resistance lung squamous cell carcinoma adenocarcinoma line
IT Keratins

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(17; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Keratins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(19; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Antigens
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(HPA (human pulmonary adenocarcinoma); mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Animal cell line
(RAL and CAEP; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Gene, animal
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(TP53, mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Lung, neoplasm
(adenocarcinoma, metastasis; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Drug resistance
(antitumor; drug resistance of two new human squamous and adenocarcinoma of lung cell lines)

IT Gene, animal
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(c-Ki-ras, mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Cytoplasm
(cytosol, neuron-specific enolase in; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Mutation
(deletion, del(1)(q32); mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Keratins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(high-mol.-wt.; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Chromosome
(human 1, deletion del(1)(q32); mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Chromosome
(human 2, pentasomy; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Neoplasm
(metastasis, from lung; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT Cell morphology
Chromosome aberrations
Disease models
(mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines).

IT Carcinoembryonic antigen
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)

IT p53 (protein)
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)
IT Ras proteins
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(p21c-Ki-ras, mutation; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)
IT Mutation
(point; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)
IT Antitumor agents
(resistance to; drug resistance of two new human squamous and adenocarcinoma of lung cell lines)
IT Lung, neoplasm
(squamous cell carcinoma, metastasis; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)
IT 50-07-7, Mitomycin-C 51-21-8 865-21-4, Vinblastine 3778-73-2, Ifosfamide 15663-27-1, Cisplatin 23214-92-8, Doxorubicin **33069-62-4, Taxol** 33419-42-0, Etoposide 39800-16-3, 4-Hydroperoxycyclophosphamide 41575-94-4, Carboplatin 71486-22-1, Vinorelbine 95058-81-4, Gemcitabine 114977-28-5, Taxotere
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug resistance of two new human squamous and adenocarcinoma of lung cell lines)
IT 9014-08-8, Enolase
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(neuron-specific; mol. and biol. features of two new human squamous and adenocarcinoma of lung cell lines)
RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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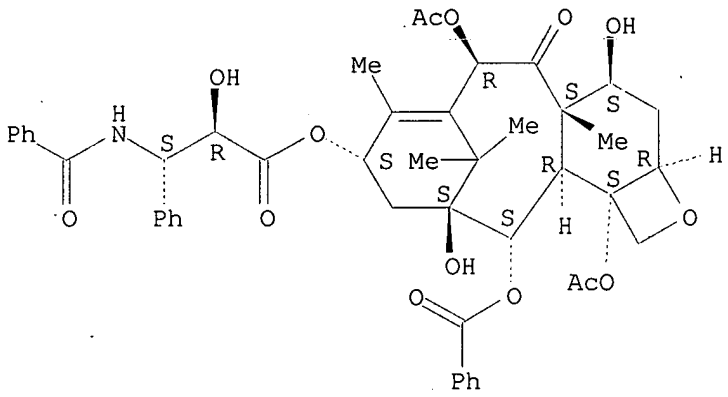
IT **33069-62-4, Taxol**
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(drug resistance of two new human squamous and adenocarcinoma of lung cell lines)
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:562471 HCAPLUS
DN 129:311598
TI Cytogenetic and molecular characterization of random chromosomal rearrangements activating the drug resistance gene, MDR1/P-glycoprotein, in drug-selected cell lines and patients with drug refractory ALL
AU Knutsen, Turid; Mickley, Lyn A.; Ried, Thomas; Green, Eric D.; Du Manoir, Stanislas; Schrock, Evelin; Macville, Marryn; Ning, Yi; Robey, Robert; Polymeropoulos, Mihael; Torres, Rosarelis; Fojo, Tito
CS Medicine Branch, Division of Clinical Sciences, NCI, NIH, Bethesda, MD, USA
SO Genes, Chromosomes & Cancer (**1998**), 23(1), 44-54
CODEN: GCCAES; ISSN: 1045-2257
PB Wiley-Liss, Inc.
DT Journal
LA English
CC 3-4 (Biochemical Genetics)
Section cross-reference(s): **1**, 14
AB Drug resistance, both primary and acquired, is a major obstacle to advances in cancer chemotherapy. In vitro, multidrug resistance can be mediated by P-glycoprotein (PGY1), a cell surface phosphoglycoprotein that acts to efflux natural products from cells. PGY1 is encoded by the MDR1 gene located at 7q21.1. Overexpression of MDR1 has been demonstrated in many cancers, both in patient tumors and in cell lines selected with a variety of chemotherapeutic agents. Recent studies in drug-selected cell lines and patients samples have identified hybrid mRNAs comprised of an active, but apparently random, gene fused 5' to MDR1 by constitutively expressed genes may be a mechanism for activation of this gene following

drug exposure. In this study, fluorescence in situ hybridization (FISH) using whole chromosome paints (WCP) and bacterial artificial chromosome (BAC)-derived probes showed structural rearrangements involving 7q in metaphase and interphase cells, and comparative genomic hybridization (CGH) revealed high levels of amplification at chromosomal breakpoints. In an adriamycin-selected resistant colon cancer line (S48-3s/Adr), WCP4/WCP7 revealed t(4;7)(q31;q21) and BAC-derived probes demonstrated that the breakpoint lay between MDR1 and sequences 500-1000 kb **telomeric** to it. Similarly, in a subline isolated following exposure to actinomycin D (S48-3s/ActD), a hybrid MDR1 gene composed of heme oxygenase-2 sequences (at 16p13) fused to MDR1 was identified and a rearrangement confirmed with WCP7 and a **subtelomeric** 16p probe. Likewise, in a **paclitaxel**-selected MCF-7 subline where CASP sequences (at 7q22) were shown to be fused to MDR1, WCP7 showed an elongated chromosome 7 with a homogeneously staining regions (hsr); BAC-derived probes demonstrated that the hsr was composed of highly amplified MDR1 and CASP sequences. In all three selected cell lines, CGH demonstrated amplification at breakpoints involving MDR1 (at 7q21) and genes fused to MDR1 at 4q31, 7q22, and 16p13.3. Finally, in samples obtained from two patients with drug refractory ALL, BAC-derived probes applied to archived marrow cells demonstrated that a breakpoint occurred between MDR1 and sequences 500-1000 kb **telomeric** to MDR1, consistent with a random chromosomal rearrangement.. These results support the proposal that random chromosomal rearrangement leading to capture and activation of MDR1 is a mechanism of acquired of drug resistance.

ST chromosome rearrangement drug resistance gene activation; gene MDR1 activation drug resistance leukemia; P glycoprotein gene drug resistance leukemia

IT Gene, animal
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(CASP (CAAT displacement protein alternatively spliced product); chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Gene, animal
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(HMOX2; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)

IT Gene, animal
Multidrug resistance proteins
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(MDR1; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Gene, animal
RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)
(NRF1; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

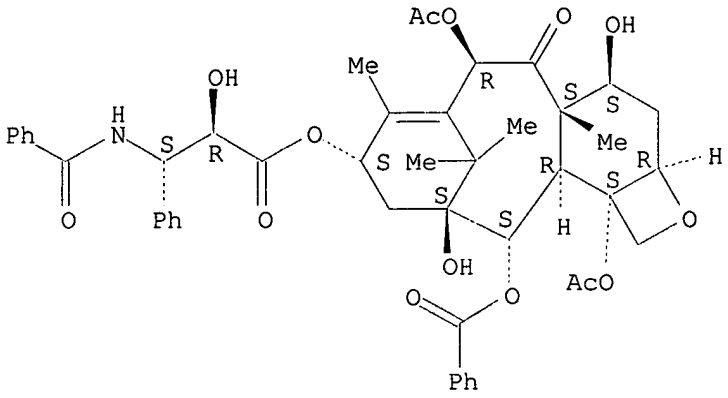
IT Glycoproteins, specific or class
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(P170; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Leukemia
(acute lymphocytic; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)

IT Mutation
(chromosomal rearrangements activating P-glycoprotein multidrug

resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)
IT Drug resistance
(chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Intestine, neoplasm
(colon, adenocarcinoma; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected colon adenocarcinoma cell line)
IT Chromosome
(human 16; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Chromosome
(human 1; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Chromosome
(human 4; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Chromosome
(human 7; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Nucleic acid hybridization
(in situ, fluorescence; detection of chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT Recombination, genetic
(rearrangement; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells and patients with drug refractory acute lymphoblastic leukemia)
IT 9059-22-7, Heme oxygenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(2; chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 and heme oxygenase 2 gene in drug resistance)
IT 50-76-0, Actinomycin D 25316-40-9, Adriamycin **33069-62-4, Paclitaxel**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells)
IT **33069-62-4, Paclitaxel**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chromosomal rearrangements activating P-glycoprotein multidrug resistance gene MDR1 in drug-selected cells)
RN 33069-62-4 HCAPLUS
CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:200650 HCAPLUS
DN 128:265840
TI **Paclitaxel** and water-soluble poly(L-glutamic acid)-**paclitaxel** induce direct chromosomal abnormalities and cell death in a murine metastatic melanoma cell line
AU Multani, Asha S.; Li, Chun; Ozen, Mustafa; Yadav, Maneesha; Yu, Dong-Fang; Wallace, Sidney; Pathak, Sen
CS Department of Cell Biology, The University of Texas M. D. Anderson Cancer Center, Houston, TX, 77030, USA
SO Anticancer Research (**1997**), 17(6D), 4269-4274 RC261.A1.A68
CODEN: ANTRD4; ISSN: 0250-7005
PB Anticancer Research
DT Journal
LA English
CC **1-6** (Pharmacology)
AB The effects of **paclitaxel** and water-sol. poly(L-glutamic acid)-**paclitaxel** (PG-TXL) on chromosome morphol., **telomeric** assocns., and induction of cell death were studied in a murine melanoma cell line (K-1735 clone X-21). Cells were treated with various concns. (0.1-8.0 .mu.g/mL) of **paclitaxel** alone, PG alone, or PG-TXL for 2 h and 4 h and harvested immediately without recovery. The frequency of metaphases with **telomeric** assocns. increased, metaphases had clumped and distorted chromosome morphol., cells accumulated in metaphase (mitotic arrest), and cell death had been induced. Cells treated with PG-TXL showed more such abnormalities than did cells treated with either **paclitaxel** or PG alone. PG-TXL may be superior to **paclitaxel** alone in inducing cytotoxic effects, and these effects could be mediated by various chromosomal abnormalities in cancer cells.
ST **paclitaxel** polyglutamate conjugate melanoma chromosome mitosis; antitumor **paclitaxel** polyglutamate conjugate
IT Antitumor agents
(melanoma; chromosomal abnormalities and cell death induction by **paclitaxel** and **paclitaxel**-poly(L-glutamate) conjugate as)
IT Antitumor agents
(metastasis; chromosomal abnormalities and cell death induction by **paclitaxel** and **paclitaxel**-poly(L-glutamate) conjugate as)
IT Chromosome
(**paclitaxel** and **paclitaxel**-poly(L-glutamate) conjugate induction of chromosomal abnormalities in metastatic melanoma cells)
IT Mitosis
(**paclitaxel** and **paclitaxel**-poly(L-glutamate)

conjugate induction of mitotic abnormalities in metastatic melanoma cells)

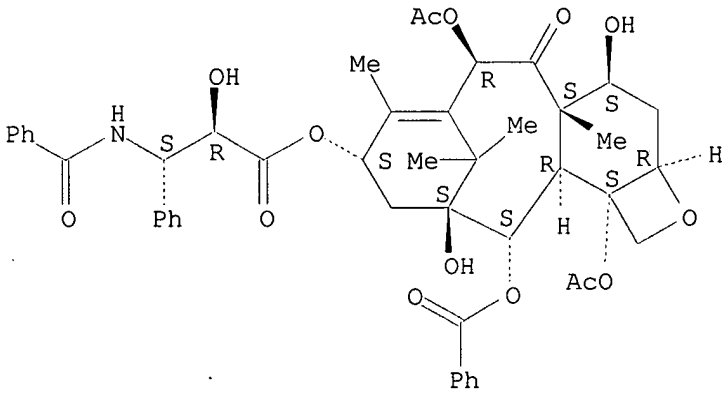
IT 25513-46-6D, Poly(L-glutamic acid), conjugate with **paclitaxel**
33069-62-4, Paclitaxel 33069-62-4D,
Paclitaxel, conjugate with poly(L-glutamic acid)
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(chromosomal abnormalities and cell death in metastatic melanoma cells induction by)

IT **33069-62-4, Paclitaxel 33069-62-4D,**
Paclitaxel, conjugate with poly(L-glutamic acid)
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(chromosomal abnormalities and cell death in metastatic melanoma cells induction by)

RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

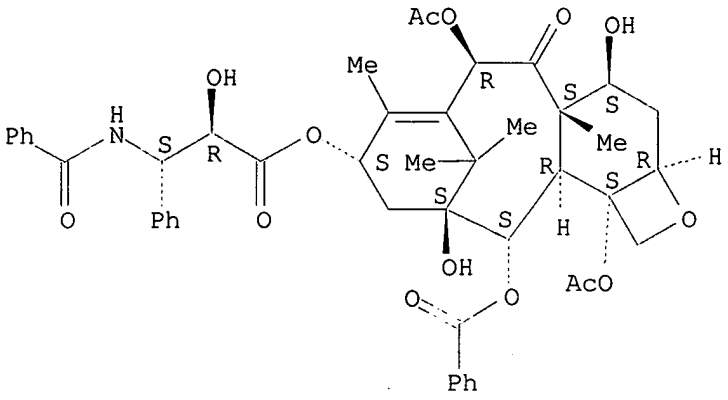
Absolute stereochemistry. Rotation (-).



RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, .beta.-(benzoylamino)-.alpha.-hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (.alpha.R,.beta.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L65 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2002 ACS
AN 1998:29884 HCAPLUS
DN 128:178752
TI Inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells in culture
AU Ku, Wei-Chi; Cheng, Ann-Joy; Wang, Tzu-Chien V.
CS Department of Molecular and Cellular Biology, College of Medicine, Chang Gung University, Kwei-San, Taiwan
SO Biochemical and Biophysical Research Communications (**1997**), 241(3), 730-736
CODEN: BBRCA9; ISSN: 0006-291X
PB Academic Press
DT Journal
LA English
CC 14-1 (Mammalian Pathological Biochemistry)
Section cross-reference(s): **1**, 7, 13
AB **Telomerase** is a specialized ribonucleoprotein polymerase that adds hexanucleotides (TTAGGG) onto human chromosomal ends. The expression of **telomerase** activity has been assocd. with cell immortalization and the malignant phenotype in most cancers. How the **telomerase** activity is regulated in cancer cells is presently not known. In this work, the effects of cell cycle blockers, DNA damaging agents, TopII inhibitors and proteins kinase inhibitors on the **telomerase** activity were examd. in cultured nasopharyngeal carcinoma cells NPC-076. Agents which interfere with tubulin assembly (**Taxol** and vinblastine) and agents which arrest cells at S phase (methotrexate and 5-fluorouracil) did not inhibit **telomerase** activity of treated cells. Agents which damage DNA (cisplatin, Me methanesulfonate, and UV radiation) and TopII inhibitors (etoposide and daunorubicin) also did not inhibit **telomerase** activity of treated cells. Among the protein kinase inhibitors examd., no significant inhibition of **telomerase** activity was obsd. with cells treated with quercetin, H-89, or herbimycin A. On the other hand, two protein kinase C (PKC) inhibitors (bisindolylmaleimide I and H-7) were found to produce a big inhibition of **telomerase** activity in treated cells. Staurosporine produced a moderate inhibition, and sphingosine had a small inhibitory effect. The inhibition of **telomerase** activity by PKC inhibitors appears to be specific since the treated cells were mostly viable (i.e., greater than 75%) and still retained significant levels of protein synthesis capability. These results implicate that protein kinase C is involved in the regulation of **telomerase** activity in vivo.
ST **telomerase** regulation protein kinase C cancer; antitumor PKC inhibitor **telomerase**
IT Antitumor agents

Neoplasm
(inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells)
IT 62996-74-1, Staurosporine 84477-87-2, H-7 169939-94-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells)
IT **120178-12-3, Telomerase** 141436-78-4, Protein kinase C
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells)
IT **120178-12-3, Telomerase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of **telomerase** activity by PKC inhibitors in human nasopharyngeal cancer cells)
RN 120178-12-3 HCAPLUS
CN Nucleotidyltransferase, terminal deoxyribo- (telomeric DNA) (9CI) (CA INDEX NAME)

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L103 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:386690 BIOSIS
DN PREV200200386690
TI Simultaneous targeting of telomeres and telomerase as a cancer therapeutic approach.
AU Mo, Yiqun (1); Gan, Yuebo (1); Johnston, Jeffrey S. (1); Song, Saehum (1); Xiao, Xiaodong (1); **Wientjes, M. Guillaume (1); Au, Jessie L.-S. (1)**
CS (1) Ohio State University, Columbus, OH USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2002) Vol. 43, pp. 251. print.
Meeting Info.: 93rd Annual Meeting of the American Association for Cancer Research San Francisco, California, USA April 06-10, 2002
ISSN: 0197-016X.
DT Conference
LA English
CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
Cytology and Cytochemistry - Human *02508
Biochemical Studies - General *10060
Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
Enzymes - General and Comparative Studies; Coenzymes *10802
Pathology, General and Miscellaneous - Therapy *12512
Pharmacology - General *22002

Pharmacology - Clinical Pharmacology *22005
Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy *24008
BC Hominidae 86215
IT Major Concepts
Pharmacology; Tumor Biology
IT Parts, Structures, & Systems of Organisms
telomere
IT Chemicals & Biochemicals
3'-azido-3'-deoxythymidine [**AZT**]: antineoplastic - drug, enzyme inhibitor - drug; RNA; **paclitaxel**: antineoplastic - drug; telomerase: regulation
IT Miscellaneous Descriptors
cell growth rate; Meeting Abstract
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
FaDu cell line (Hominidae): apoptosis, human pharynx tumor cells
ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates
RN **30516-87-1** (3'-AZIDO-3'-DEOXYTHYMIDINE)
33069-62-4 (**PACLITAXEL**)
120178-12-3 (TELOMERASE)

L103 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN **2001:468784** BIOSIS
DN **PREV200100468784**
TI 3'-azido3'-deoxythymidine enhances **paclitaxel** activity in human FaDu cells.
AU Johnston, Jeffrey S. (1); **Wientjes, M. Guillaume (1)**; **Au, Jessie L.-S. (1)**
CS (1) The Ohio State University, Columbus, OH USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 507. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research New Orleans, LA, USA March 24-28, 2001
ISSN: 0197-016X.
DT Conference
LA English
SL English
CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
Cytology and Cytochemistry - Human *02508
Biochemical Studies - General *10060
Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
Pathology, General and Miscellaneous - Therapy *12512
Pharmacology - General *22002
Pharmacology - Clinical Pharmacology *22005
Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
BC Hominidae 86215
IT Major Concepts
Pharmacology; Tumor Biology
IT Chemicals & Biochemicals
3'-azido-3'-deoxythymidine [**AZT**]: antineoplastic - drug, pharmaceutical adjunct - drug; **paclitaxel**: **AZT** -induced antitumor activity enhancement, antineoplastic - drug
IT Miscellaneous Descriptors
drug regimen; Meeting Abstract
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name

FaDu cell line (Hominidae): combination drug treatment, human epidermoid carcinoma cell line, in-vitro model system
ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Primates; Vertebrates
RN **30516-87-1** (3'-AZIDO-3'-DEOXYTHYMIDINE)
33069-62-4 (**PACLITAXEL**)

L103 ANSWER 3 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2001:369554 BIOSIS
DN PREV200100369554
TI **AZT** enhances antitumor activity of **paclitaxel** in human FaDu xenografts in mice.
AU Song, SaeHeum (1); **Wientjes, M. Guill (1)**; **Au, Jessie L.-S. (1)**
CS (1) Ohio State University, Columbus, OH USA
SO Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2001) Vol. 42, pp. 81. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research New Orleans, LA, USA March 24-28, 2001
ISSN: 0197-016X.
DT Conference
LA English
SL English
CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
Cytology and Cytochemistry - Animal *02506
Cytology and Cytochemistry - Human *02508
Biochemical Studies - General *10060
Biochemical Studies - Nucleic Acids, Purines and Pyrimidines *10062
Pathology, General and Miscellaneous - Therapy *12512
Pharmacology - General *22002
Pharmacology - Clinical Pharmacology *22005
Neoplasms and Neoplastic Agents - Pathology; Clinical Aspects; Systemic Effects *24004
Neoplasms and Neoplastic Agents - Therapeutic Agents; Therapy *24008
Chemotherapy - Antiviral Agents *38506
BC Hominidae 86215
Muridae 86375
IT Major Concepts
Infection; Pharmacology; Tumor Biology
IT Chemicals & Biochemicals
3-'**azidothymidine** [**AZT**]: antiviral - drug, **paclitaxel** activity enhancer; **paclitaxel**: antineoplastic - drug
IT Miscellaneous Descriptors
apoptosis; body weight loss; drug interactions; Meeting Abstract
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia; Muridae: Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
FaDu cell line (Hominidae): human pharynx tumor cells; mouse (Muridae): animal model
ORGN Organism Superterms
Animals; Chordates; Humans; Mammals; Nonhuman Mammals; Nonhuman Vertebrates; Primates; Rodents; Vertebrates
RN **30516-87-1** (3-'**AZIDOTHYMIDINE**)
33069-62-4 (**PACLITAXEL**)

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L124 ANSWER 1 OF 3 WPIX (C) 2002 THOMSON DERWENT
AN 2001-071022 [08] WPIX
DNC C2001-019846
TI Inhibiting or reducing growth of cell for treating cancer, comprising administering telomere damage-inducing agent and telomerase inhibitory agent to the cell.
DC B04 B05 D16
IN **AU, J L; WIENTJES, G**
PA (AUJL-I) AU J L; (WIEN-I) WIENTJES G
CYC 92
PI WO 2000074667 A2 20001214 (200108)* EN 97p A61K031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2000054665 A 20001228 (200119) A61K031-00
ADT WO 2000074667 A2 WO 2000-US15544 20000605; AU 2000054665 A AU 2000-54665 20000605
FDT AU 2000054665 A Based on WO 200074667
PRAI US 1999-137549P 19990604
IC ICM A61K031-00
AB WO 200074667 A UPAB: 20010207
NOVELTY - Inhibiting or reducing the growth of a cell (M1), comprising administering a telomere damage-inducing agent (I) and a telomerase inhibitory agent (II) to the cell, so that an inhibition or reduction in the growth of the cell is achieved, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) identifying (M2) an agent or agents that inhibits or reduces the growth of a cell, comprising:
(a) contacting a cell with at least one agent;
(b) determining if telomere damage has occurred;
(c) contacting a cell with the same or another agent; and
(d) determining if a reduction in telomerase activity has occurred,
where an agent or agents, alone or in combination, that are determined to induce telomere damage and inhibit telomerase activity, are inhibits of cell growth;
(2) an agent or agents identified by (M2);

(3) a pharmaceutical composition (III) comprising the agent or agents identified by (M2);

(4) a composition (IV) suitable for inhibiting or reducing the growth of a cell comprising (I) and (II);

(5) an article (V) of manufacture comprising a vial containing (I) and (II) which are purified;

(6) enhancing (M3) the efficacy of a chemotherapeutic agent, comprising administering a chemotherapeutic agent to a cell in the presence of (II);

(7) detecting (M4) telomerase activity in cell extract, comprising:

(a) incubating a reaction mixture comprising a cell extract, a nucleic acid substrate for a telomerase, and nucleotide triphosphates, for the nucleic acid substrate to be polymerized,

(b) contacting the substrate with at least one nucleic acid primer and subjecting the substrate to a polymerase chain reaction; and

(c) detecting the presence of polymerase chain reaction products to detect telomerase activity in the cell extract;

(8) determining (M5) telomere length, comprising:

(a) hybridizing telomeric DNA fragments with a telomere probe; and

(b) determining the amount of hybridized telomere probe present, where the amount of hybridized telomere probe present is an indication of telomere length; and

(9) identifying (II), comprising:

(a) contacting a cell with an agent;

(b) incubating a reaction mixture comprising an extract of the cell, a nucleic acid substrate for a telomerase, and nucleotide triphosphates for the nucleic acid substrate to be polymerized,

(c) contacting the substrate with at least one nucleic acid primer;

(d) subjecting the substrate to a polymerase chain reaction; and

(e) detecting a decrease in the presence of polymerase chain reaction products to identify (II).

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Inhibitor of cell growth; inducer of telomere damage.

Antitumor effect of an agent that damages telomeres (i.e. **paclitaxel**) by the telomerase inhibitor **AZT**, in immunodeficient mice bearing human head and neck caner FaDu xenografts, was tested. The activity of **paclitaxel**, with or without **AZT**, was evaluated in immunodeficient mice (male Balb/c nu/nu mice) bearing the human pharynx FaDu xenografts. The mice were divided into four treatment groups: saline control, **AZT**, **paclitaxel**, **paclitaxel+AZT**. The antitumor effect of the drug treatments was measured. The results showed that **AZT** enhanced the in vivo antitumor effect of **paclitaxel**, treatment with the combination of **paclitaxel** and **AZT** resulted in a decrease in tumor size, and animals in the control group, **paclitaxel** group, and **AZT** group showed an up to 4-fold increase in tumor size. The tumor size of the animals which received the combination of **paclitaxel** and **AZT** was significantly smaller than all other dose groups. Treatment with single agents (either **paclitaxel** or **AZT**) produced minimal toxicity with no toxicity-related death and minimal body weight loss compared to the pretreatment weight and the addition of **AZT** to **paclitaxel** did not enhance the body weight loss, indicating that **AZT** did not enhance the host toxicity of **paclitaxel**.

USE - The agent or agents identified by (M2) are useful for inhibiting or reducing the growth of a cell and for treating aberrant cell growth in a mammal, especially a human. (I) and (II) are useful for treating cancer, and identifying a patient having a cancer. (II) is useful for inhibiting or reducing resistance of a cell to (I). (All claimed). (I) and (II) are useful in screening assays for diagnosis, prognosis and treatment of cancer and in the design, formulation, synthesis, manufacture, and/or production of a drug or pharmaceutical composition for

use in the diagnosis, prognosis and treatment of cancer.
ADVANTAGE - The methods of measuring telomerase activity have increased sensitivity compared to prior art methods.
Dwg.0/10

FS CPI
FA AB; DCN
MC CPI: B04-B03B; B04-E01; B04-E05; B04-E06; B04-N04; B11-C08E1; B11-C08E3; B11-C08E5; B12-K04A1; B12-K04E; B12-K04F; B14-H01; B14-H01B; D05-H09; D05-H18B
TECH UPTX: 20010207
TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Method: In (M1) the growth is aberrant and the cell is a tumor cell of brain, breast, ovary, testes, bladder, prostate, colon, lung, liver, pancreas or uterus or the cell is a leukemic cell. The tumor is benign or malignant and the growth is hyperplastic or hypertrophic. The inhibition or reduction in the growth of the cell, preferably a human cell, comprises apoptosis. (I) is **paclitaxel** or its derivative and (II) is a nucleotide analog, such as **AZT** or **d4T** or its derivative or an antisense nucleic acid corresponding to a telomerase. In (M4), the cell extract is derived from a human cell that has been contacted with (II).. (M4) further comprises contacting the cell extract with (II). The nucleic acid substrate comprises a sequence TTAGGG and the nucleic acid primer is labeled with a radioisotope or a fluorescent label and comprises sequences AATCCGTCGAGCAGAGTT and CCCTTACCCTTACCCTTACCCTTA. In (M5), the telomeric DNA fragments are produced using a restriction enzyme such as HinfI, HaeIII or HhaI and the telomeric DNA is derived from a cell that has been contacted with (II). The telomere probe comprises a sequence TTAGG and TTAGGGTTAGGGTTAGGGTTAGGG and is labeled with a radioisotope or a fluorescent label.
Preferred Formulation: (I) or (II) is formulated as a nanoparticle 500 nm-1 micro-m in diameter and comprises a cross linked gelatin or is formulated as a microparticle of about 1-10 micro-m diameter.
Preferred Agent: In (V), (I) and (II) are packaged in separate vials and are formulated in a carrier.

ABEX
ADMINISTRATION - (I) and (II) are administered locally, systemically, or regionally as a timed-release formulation and as a sub-therapeutic dose (claimed) at a dose of 0.0001-100, preferably 0.10-4 mg/kg. (IV) is administered by oral, nasal, parenteral, topical, rectal, vaginal, intralesional, intraorbital, intracapsular, intracisternal or ophthalmic route or by inhalation.

L124 ANSWER 2 OF 3 WPIX (C) 2002 THOMSON DERWENT
AN **2000-116702** [10] WPIX
DNC **C2000-035674**
TI Treatment of AIDS-associated Kaposi's sarcoma.
DC B02
IN DUCHIN, K; GRIFFING, S; HARRIMAN, G R; METTINGER, K L; DUCHIN, K L
PA (BAKE-N) BAKER NORTON PHARM INC
CYC 81
PI WO 9965307 A1 19991223 (200010)* EN 41p A01N043-20
RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 9867873 A 20000105 (200024) A01N043-20
NO 9904712 A 19991126 (200026) A61K031-33
CN 1255041 A 20000531 (200045) A01N043-20
EP 1071329 A1 20010131 (200108) EN A01N043-20
R: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
JP 2001114685 A 20010424 (200140)# 62p A61K031-337

KR 2001005949 A 20010115 (200151)# A61K031-36
JP 2002518297 W 20020625 (200243) 41p A61K031-337
ADT WO 9965307 A1 WO 1998-US6221 19980330; AU 9867873 A AU 1998-67873 19980330, WO 1998-US6221 19980330; NO 9904712 A WO 1998-US6221 19980327, NO 1999-4712 19990927; CN 1255041 A CN 1998-805000 19980330, WO 1998-US6221 19980330; EP 1071329 A1 EP 1998-913281 19980330, WO 1998-US6221 19980330; JP 2001114685 A JP 1999-324494 19991008; KR 2001005949 A KR 1999-709026 19990927; JP 2002518297 W WO 1998-US6221 19980330, JP 2000-554198 19980330
FDT AU 9867873 A Based on WO 9965307; EP 1071329 A1 Based on WO 9965307; JP 2002518297 W Based on WO 9965307
PRAI WO 1998-US6221 19980330; US 1997-41651P 19970327; JP 1999-324494 19991008; KR 1999-709026 19990927
IC ICM A01N043-20; A61K031-33; A61K031-337; A61K031-36
ICS A61K045-00; A61P035-00; A61P037-04; A61P043-00
AB WO 9965307 A UPAB: 20010809
NOVELTY - Treatment of AIDS associated Kaposi's sarcoma comprises concomitantly administering a taxane with one or more protease inhibitors.

ACTIVITY - Cytostatic; Anti-HIV. Initial treatment of AIDS-associated Kaposi's sarcoma consisted of a 3 hour infusion of **paclitaxel** at 100 mg/m2 administered every 14 days, followed by treatment at 75 mg/m2. The patient was a 33 year old black male diagnosed as HIV-positive in 1994 and suffering from Kaposi's sarcoma since February 1995. Previous chemotherapy included DaunoXome (RTM) to which he showed stable disease but had toxicity, and Adriamycin (RTM), bleomycin and vincristine, to which he responded partially, but subsequently failed. The patient was on antiretroviral therapy at the time he entered the protocol which consisted of the protease inhibitor indinavir and two reverse transcriptase inhibitors, **stavudine** and lamivudine. He continued on these medications. During the treatment with the reduced dose of **paclitaxel**, after the first cycle, the patient showed a partial response to **paclitaxel**. The Karnofsky performance score improved from 60 at baseline to 90 at cycle 10 and the Symptom Distress Scale score improved from 35 at baseline to 18 at cycle 10. A marked decrease in edema and the prominance of facial lesions was seen by cycle 7.

MECHANISM OF ACTION - Protease-Inhibitor; Reverse-Transcriptase-Inhibitor.

USE - The method can be used when treatment with liposomal anthracyclines, liposomal doxorubicin, combinations of adriamycin, bleomycin or vincristine, liposomal anthracyclines and combinations of adriamycin, bleomycin or vincristine or two or more cytotoxic chemotherapies have failed.

ADVANTAGE - The compositions are easily administered and can be given at dosages that are safe and provide for manageable side effects.

Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: B06-A03; B14-A02; B14-D06; B14-D07C; B14-G01B; **B14-H01**
TECH UPTX: 20000228
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Method - The method further comprises concomitantly administering one or more reverse transcriptase inhibitor.
ABEX
ADMINISTRATION - The dose of taxane is 30-200 (preferably 50-155, especially 100) mg/m2 every two weeks. Preferably an induction therapy of 10 weeks is carried out.

L124 ANSWER 3 OF 3 WPIX (C) 2002 THOMSON DERWENT
AN **2000-022942** [02] WPIX
DNC **C2000-005511**
TI Composition for the treatment of cancer or infectious disease.
DC B04 B05 D16
IN BARTHOLEYNS, J; FOURON, Y; ROMET-LEMONNE, J

PA (IDMI-N) IDM IMMUNO-DESIGNED MOLECULES
CYC 87
PI WO 9951248 A1 19991014 (200002)* EN 26p A61K035-14
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9931479 A 19991025 (200011) A61K035-14
EP 1067944 A1 20010117 (200105) EN A61K035-14
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
JP 2002510639 W 20020409 (200227) 27p A61K035-14
ADT WO 9951248 A1 WO 1999-EP2105 19990329; AU 9931479 A AU 1999-31479 19990329; EP 1067944 A1 EP 1999-913310 19990329, WO 1999-EP2105 19990329; JP 2002510639 W WO 1999-EP2105 19990329, JP 2000-542019 19990329
FDT AU 9931479 A Based on WO 9951248; EP 1067944 A1 Based on WO 9951248; JP 2002510639 W Based on WO 9951248
PRAI EP 1998-400783 19980402
IC ICM A61K035-14
ICS A61K045-00; A61P031-00; A61P035-00; C12N005-00; C12N005-08
ICI A61K031:00, A61K035:14, A61K038:19, A61K039:00; A61K031:00, A61K035-14; A61K035-14, A61K038:19; A61K035-14, A61K039:00
AB WO 9951248 A UPAB: 20000112
NOVELTY - Combined composition contains the following individual components, in the form of a kit-of-parts:
(a) monocyte derived cells, particularly cytotoxic macrophages; and
(b) chemotherapy or immunotherapy drugs, for the simultaneous, separate or sequential use, for the treatment of cancer or infectious diseases.
USE - The composition is useful for the treatment of cancer or infectious diseases.
Dwg.0/2
FS CPI
FA AB; DCN
MC CPI: B02-A; B02-C; B02-P; B04-A07A; B04-F04; B04-H02B; B04-H02N; B04-H04; B04-H05C; B04-M01; B05-A03B; B10-A07; B10-A13D; **B14-H01**; D05-H07; D05-H08
TECH UPTX: 20000112
TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred materials: The monocyte derived cells contain chemotherapy or immunotherapy drugs. The chemotherapy drug is selected among cytotoxic compounds such as anthracyclins, daunorubicin, adriamycin, taxoter derivatives, vinca alkaloids, vincristine, **taxol**, carmustine, cisplatin, fluorouracils, cytostatic compounds such as polyamine inhibitors, topoisomerase inhibitors, tamoxifen, prodasone, or sandostatin, or compounds inducing apoptosis such as sodium butyrate or mitomycin C, antibiotics such as penicillins, P-lactamines, cephalosporins, cyclins, aminoglucosides, macrolides or sulfamides, or antiviral drugs such as **AZT**, protease inhibitors or acyclovir, **retrovir** or foscarnet. The immunotherapy drug is selected from cytokines such as cyclosporin, azathioprine, cyclophosphamide, IFN-gamma, IL-12, IL-2, GM-CSF, G-CSF, immuno-adjuvants such as murapeptides or BCG, and vaccines directed against tumor or infectious antigens, in the presence or not of adjuvants.
Preparation: The monocyte derived cells are such as prepared by:
(i) recovery of blood derived mononuclear cells directly from blood apheresis or from blood bag collection, followed if necessary by centrifugation, to eliminate a substantial part of red blood cells granulocytes and platelets, and collection of peripheral blood leukocytes;
(ii) washing peripheral blood leukocytes by centrifugation (to remove 90% of platelets, red blood cells and debris) to obtain mononuclear cells;
(iii) resuspension of the total mononuclear cells (monocytes +

lymphocytes) obtained at the preceding step in culture medium (RPMI or IMDM type) at 106 to 2.107 cells/ml, possibly completed by cytokines and/or autologous serum, and culture for 5-10 days at 37 degreesC under O2/CO2 atmosphere in hydrophobic gas permeable bags, to obtain monocyte derived cells and contaminating lymphocytes.
The process comprises the additional step of freezing at temperature below or equal to -80 degreesC aliquots of the above said suspension, with the addition of a cryo-preservative. The process comprises the additional step of melting said above frozen aliquots at a temperature enabling to obtain a suspension of monocyte derived cells, for instance at 4 degreesC, washing said suspension and resuspending it, for instance in an isotonic medium, to obtain a suspension of monocyte derived cells.

ABEX

ADMINISTRATION - The monocyte-derived cells and the chemotherapy or immunotherapy drugs are in the form of injectable solutions. The injectable solutions are in the form of locally injectable solutions. The injectable solutions are in the form of systemically injectable solutions. The monocyte derived cells are administered at a dose of 107-1010 (especially 108-109) monocyte derived cells per injection. The monocyte derived cells are administered in a repeated way up to ten times, the interval between each administration being between three days to two months. The immunotherapy or chemotherapy drug is administered at a dose of 0.1-1000 mg/day. In the case of administration of a drug chosen among immunotherapy drug, antiviral drug, cytotoxic drugs, or antibiotics, the drug being administered at a dose of 10-1000 mg/day. In the case of administration of a drug chosen among cytotoxic compounds, cytostatic compounds, compounds inducing apoptosis or cytokines, the drug is administered at a dose of 0.1-100 mg/day. The immunotherapy or chemotherapy drug is administered in a repeated way up to 10 times, the interval between each administration being between one day to two months. The chemotherapy or immunotherapy drug and the monocyte derived cells are injected simultaneously. The chemotherapy or immunotherapy drug and the monocyte-derived cells are administered in sequential way, the immunotherapy or chemotherapy drug being administered before the monocyte derived cells. The interval of time between the administration of the monocyte-derived cells and the administration of the immunotherapy or chemotherapy drugs is of one day to two months. The monocyte-derived cells and the chemotherapy or immunotherapy drug are administered sequentially, the monocytes derived cells being administered before the immunotherapy or chemotherapy drug. The monocyte-derived cells are administered before the administration of a vaccine directed to tumor or infectious antigens, the monocyte derived cells administration being possibly preceded by a chemotherapy treatment.
EXAMPLE - Patients, whose primary melanoma tumor was removed by surgery, are treated with chemotherapy agent (DTIC) (dacarbazine) after relapse. When their blood count is back to normal, blood is drawn up through apheresis in order to prepare large amounts of MD-APCS. These cells are then incubated for 4 hours with allogeneic tumor extract. 3 weekly subcutaneous injections (at 4 different sites) of 10' cells are made. Two months later, a cocktail of three antigens (MAGE-3, MELAN A and gp-100) plus adjuvant is injected to the patients in order to boost the immune system. The increased immune response is monitored by measuring the number of antigen specific CD8 T lymphocytes by ELISPOT technique. It is also assessed that the relapse-free time is significantly increased.

=> d his 166-

(FILE 'REGISTRY' ENTERED AT 12:07:57 ON 15 DEC 2002)

FILE 'HCAPLUS' ENTERED AT 12:09:09 ON 15 DEC 2002

FILE 'MEDLINE' ENTERED AT 12:09:25 ON 15 DEC 2002

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L66         7297 S L18
L67         9591 S L19 OR L20
L68         9591 S L66,L67
L69         6581 S L16
L70         8397 S L23
L71         8397 S L69,L70
L72            5 S L68 AND L71
                 E ANTISENSE/CT
                 E E6+ALL
L73        11150 S E17+NT
                 E NUCLEOTIDE/CT
                 E E48+ALL
L74       320607 S E7+NT
L75       965380 S D13./CT
L76         1168 S L71 AND L73-L75
L77          542 S (L73 OR L74 OR L75)(L)(TU OR AD OR PD)/CT AND L76
L78          436 S L77 AND C4./CT
L79          153 S L78 AND PY<=1999
                 E ANTINEOPLASTIC COMBINED CHEMOTHERAPY/CT
                 E E4+ALL
L80        47689 S E38+NT
                 E DRUG COMBINATION/CT
                 E E6+ALL
L81        34504 S E4
                 E DRUG THERAPY, COMBINATION/CT
                 E E3+ALL
L82        70827 S  E4+NT
L83          319 S L77 AND L80-L82
L84           97 S L83 AND PY<=1999
L85           93 S L84 AND C4./CT
L86           83 S L85/ENG
L87            0 S L84 AND ?TELOMER?
L88           76 S L86 AND (PACLITAXEL OR TAXOL)/TI,CN,CT
L89           15 S L88 NOT DEOXYCYTIDINE

     FILE 'CANCERLIT' ENTERED AT 12:21:06 ON 15 DEC 2002
L90         1610 S L68
L91         8604 S L71
L92            3 S L90 AND L91

     FILE 'EMBASE' ENTERED AT 12:21:40 ON 15 DEC 2002
L93        17936 S L68
L94        12253 S L71
L95           78 S L93 AND L94
L96           50 S L95 AND PY<=1999
L97           43 S L96/ENG
L98           18 S L97 NOT AB/FA
L99           25 S L97 NOT L98

     FILE 'BIOSIS' ENTERED AT 12:24:22 ON 15 DEC 2002
L100           8 S L95
                 SEL DN AN 3
L101           1 S L100 AND E1-E2
L102           3 S L100 AND (AU ? OR WIENTJES ?)/AU
L103           3 S L101,L102

     FILE 'BIOSIS' ENTERED AT 12:25:55 ON 15 DEC 2002

     FILE 'WPIX' ENTERED AT 12:26:13 ON 15 DEC 2002
L104         807 S L19 OR L20
                 E STAUVIDINE/DCN
                 E SANILVUDINE/DCN
                 E D4T/DCN
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                E D-4T/DCN
                E D 4T/DCN
                E AZT/DCN
                E E3+ALL
L105         389 S E2
L106           7 S DIDEOXY(L)DIDEHYDROTHYMIDINE
L107         937 S L104-L106
L108          59 S STAVUDIN?
                E STAVUDIN/DCN
L109         937 S L107,L108
L110        1353 S L23
                E TAXOL/DCN
                E E3+ALL
L111         763 S E2
L112        1468 S L110,L111
L113          23 S L109 AND L112
L114           1 S L113 AND (AU ? OR WIENTJES ?)/AU
                E R11606+ALL/DCN
L115          90 S E1
L116          23 S L115,L109 AND L112
L117           1 S L114 AND L116
L118          22 S L113,L116 NOT L117
L119          12 S (P631 OR P632 OR P633 OR P630)/M0,M1,M2,M3,M4,M5,M6 AND L118
L120           8 S (B14-H01 OR C14-H01 OR B14-H01A OR C14-H01A OR B14-H01B OR C1
L121           0 S (B14-S09 OR C14-S09 OR B12-C09 OR C12-C09)/MC AND L118
L122          12 S L119,L120
                SEL DN AN 7 9 L122
L123           2 S E1-E4
L124           3 S L117,L123 AND L104-L123
L125          10 S L118 NOT L122

     FILE 'WPIX' ENTERED AT 12:38:04 ON 15 DEC 2002
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